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of Canada

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des recherches
sur les pêcheries
du Canada

Volume 35, Index 1978



Fisheries and Environment
Canada

Pêches et Environnement
Canada

Fisheries
and Marine Service

Service des pêches
et de la mer

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Scientific Information
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Pêches et Environnement
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Journal of the Fisheries Research Board of Canada

Volume 35, Index 1978

Journal de l'office des recherches sur les pêcheries du Canada

INDEX TO PUBLICATIONS FOR 1978¹

In 1968 the Fisheries Research Board of Canada published Bulletin 164, a subject-author index and list of publications to 1964. Miscellaneous Special Publication 18, covering the period 1965-72, was published in 1973. Since 1973 an annual subject-author index has been published as a separate issue of the Journal. The index also contained a list of all articles, in all series of publications.

The 1978 index contains a subject index, author index, and list of publications, based on: (a) the 12 issues of Volume 35 of the Journal; (b) Miscellaneous Special Publications 22F, 27F, 30F, 35F, 36, 37, 37F, 38, 39, 40; (c) Bulletins 184FR, 190F, 191R, 194F; (d) Circulars, Technical, Manuscript, Data, and Industry Reports issued by Service establishments during 1978 in time to be included; (e) Studies 2386-2515, reprints of articles published in other periodicals; (f) Interpretive Articles 352-398.

All entries in the subject index are made up of an entry term plus a number of modifying terms (not exceeding three) plus a taxonomic name (omitted where the taxon is the entry term), or common name (omitted where the common name is the entry term), and a geographic entry (also omitted where the geographic area is the entry term). The entry term and modifying terms are selected from the controlled vocabulary wherever possible (*Thesaurus of Terms for Aquatic Sciences and Fisheries*, FAO Fish. Circ. 344), but in some cases it is necessary to use "free terms" (i.e. uncontrolled terms of not more than 50 characters) to adequately convey the subject concept. It is possible for these free terms to appear in any modifying position but never as entry terms.

INDEX DES PUBLICATIONS POUR 1978¹

En 1968, l'Office des recherches sur les pêcheries du Canada publiait le Bulletin n° 164 qui constituait un index des matières et des auteurs, ainsi qu'une liste des Publications antérieures à 1965. Le n° 18 des Publications diverses spéciales, visant la période de 1965 à 1972, a paru en 1973. Depuis 1973, on publie annuellement un index des matières et des auteurs a été publié comme numero distinct du Journal. Cet index comprend aussi une énumération des articles ayant paru dans toutes les séries de publications.

L'index pour 1978 comprend un répertoire des matières et des auteurs et une liste des publications, fondés sur: (a) les 12 numéros du volume 35 du Journal; (b) les Publications diverses spéciales n° 22F, 27F, 30F, 35F, 36, 37, 37F, 38, 39, 40; (c) les Bulletins numéros 184FR, 190F, 191R, 194F; (d) les Circulaires et les Rapports techniques, manuscrits, statistiques, et à l'industrie publiés par les établissements du Service, lorsqu'ils étaient prêts à temps pour y figurer; (e) les Etudes n° 2386 à 2515, qui sont des réimpressions d'articles publiés dans d'autres périodiques; (f) les Articles explicatifs n° 352 à 398.

Toutes les notices de l'index des matières sont composées d'un terme d'entrée et d'au plus trois termes modificatifs, ainsi que d'une désignation taxonomique (sauf si celle-ci constitue le terme d'entrée), ou d'une appellation courante (sauf si celle-ci est le terme d'entrée) et d'une inscription géographique (omise si la région géographique est le terme d'entrée). Dans la mesure du possible, le terme d'entrée et les termes modificatifs sont choisis suivant le vocabulaire contrôlé (*Thesaurus of Terms for Aquatic Sciences and Fisheries*, FAO Fish. Circ. 344), mais dans certains cas il est nécessaire d'employer des "termes libres" (termes non contrôlés de 50 caractères ou moins) pour exprimer convenablement le sujet traité. Les termes libres peuvent servir de termes modificatifs mais jamais de termes d'entrée.

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ABBREVIATIONS USED IN INDEX

(The designation (F) in the index indicates the article referred to was published in French, and (R) indicates the article was reprinted in 1978.)

J - Journal of the Fisheries Research Board of Canada
MSP - Miscellaneous Special Publication
B - Bulletin
T - Technical Report
M - Manuscript Report
D - Data Report
I - Industry Report
S - Studies
A - Interpretive Article
CHN - Circular of Halifax Laboratory

The Provinces and Territories of Canada are abbreviated to:

Alta.	(Alberta)	N.W.T.	(Northwest Territories)
B.C.	(British Columbia)	Ont.	(Ontario)
Man.	(Manitoba)	P.E.I.	(Prince Edward Island)
N.B.	(New Brunswick)	Que.	(Quebec)
Nfld.	(Newfoundland)	Sask.	(Saskatchewan)
N.S.	(Nova Scotia)	Y.T.	(Yukon Territory)

Certain geographical areas (particularly oceans) have their major subdivisions designated by N(north), S(south), E(east), W(west), NW(northwest), etc., also Atl.(Atlantic), Pac.(Pacific).

Certain international commissions are commonly referred to as: ICNAF(International Commission for the Northwest Atlantic Fisheries): INPFC(International North Pacific Fisheries Commission).

Scientific names, common names, and their spellings for the Canadian and American marine fishes taken within 200-m depth and for freshwater fishes are indexed according to the nomenclature recommended in *A List of Common and Scientific Names of Fishes from the United States and Canada* (Third Edition, 1970), Special Publication No. 6 of the American Fisheries Society. Where authors have used names or spellings not conforming to those recommended, index headings for such names are included, referring to the recommended ones under which the subject entries will be found.

ABREVIATIONS EN USAGE DANS L'INDEX

(La désignation (F) dans l'index signifie que l'article dont il est question a été publié en français et la désignation (R) signifie que l'article a été réimprimé en 1978.)

J - Journal de l'Office des recherches sur les pêcheries du Canada

MSP - Publications diverses spéciales

B - Bulletin

T - Rapports techniques

M - Rapports manuscrits

D - Rapports statistiques

I - Rapports à l'industrie

S - Etudes

A - Articles explicatifs

CHN - Circulaire du laboratoire d'Halifax

Les provinces et territoires du Canada sont abrégés comme suit:

Alta.	(Alberta)	N.W.T.	(Territoires du Nord-Ouest)
B.C.	(Colombie-Britannique)	Ont.	(Ontario)
Man.	(Manitoba)	P.E.I.	(Île-du-Prince-Édouard)
N.B.	(Nouveau-Brunswick)	Que.	(Québec)
Nfld.	(Terre-Neuve)	Sask.	(Saskatchewan)
N.S.	(Nouvelle-Écosse)	Y.T.	(Territoire du Yukon)

Certaines régions géographiques (surtout les océans) ont leur principales subdivisions indiquées de la façon suivante: N(nord), S(sud), E(est), W(ouest), NW(nord-ouest), ainsi que Atl.(Atlantique), P(Pacifique).

On désigne communément certaines commissions internationales de la façon suivante: ICNAF(Commission internationale des pêcheries de l'Atlantique nord-ouest), INPFC(Commission internationale des pêcheries du Pacifique nord).

Les désignations scientifiques, les noms communs et l'orthographe des poissons marins canadiens et américains, pris en deçà de 200 m de profondeur, ainsi que les poissons d'eau douce sont indexés conformément aux recommandations de l'ouvrage *A List of Common and Scientific Names of Fishes from the United States and Canada* (troisième édition, 1970), Publication spéciale n° 6 de l'American Fisheries Society. Quand un auteur utilise des désignations différentes des formes recommandées, on inclut des rubriques renvoyant à ces dernières, sous lesquelles on trouve les notices.

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The number in front of each address corresponds to the number shown at the end of titles in some of the listed series of publications to indicate from which establishment the publication or report originated, or may be obtained.

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A 384 (fishery management, stock assessment, NW Atl.)
- ATP
J 35(12) : 1542 (gills, smolts, Atlantic salmon)
T 749 (indicator, plankton biomass, impoundment, Southern Indian L., Man.)
- Auditory organs
S 2397 (ear plugs, aging methods, finback whale)
2400 (ear plugs, staining, aging methods, baleen whales)

B

Babine Lake, B.C.

- D 69 (catch statistics, fishery management, juveniles, sockeye salmon)
 S 2452 (paleolimnology, heterogeneity, phytoplankton)

Bacillariophyceae

- S 2440 (new records, *Planktoniella sol*, Bedford Basin, N.S.)

Bacteria

- J 35(1) : 1 (temperature effects, *Aeromonas salmonicida*, *A. hydrophila*, coho salmon, chinook salmon, steelhead trout)
 (1) : 8 (temperature effects, *Corynebacterium*, coho salmon, sockeye salmon, steelhead trout)
 (5) : 581 (hydrocarbons, sediments, Chedabucto Bay, N.S.)
 (8) : 1141 (diseases, *Photobacterium*, tanner crab, Ore.)
 (9) : 1234 (diseases, brook trout)
 (11) : 1504 (adsorption, antibodies, American lobster)
 S 2425 (biodegradation, petroleum)
 2427 (enzymes, *Pseudomonas aeruginosa*)
 2464 (*Enterobacter aerogenes*, *Escherichia coli*, pollution detection, soft-shell clam, N.S.)
 A 360 (heterotrophic distribution, abundance, Beaufort Sea)
 362 (diseases, gills, Pacific salmon)

Bacterial diseases (see Diseases; Disease control)

Baeoetenus (Chironomidae) (see Diptera)

Baffin Bay, Canada

- D 82 (primary production, phytoplankton, nutrients, experimental data)

Bagrus docmac (see Catfish)*Balaena mysticetus* (see Whale, bowhead)*Balaenoptera acutorostrata* (see Whale, minke)

- borealis* (see Whale, sei)
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Balanus glandula (see Barnacle)

Baltic

- A 392 (stock assessment, ecology, ringed seal, grey seal, harbor seal)

Barnacle (*Balanus glandula*)

- S 2505 (energy budget, adults, NE Pac.)

Bass, largemouth (*Micropterus salmoides*)

- J 35(1) : 157 (environmental effects, cage culture, resident fish, Crystal L., Ark.)
 (4) : 446 (cadmium, pollution effects,

predation, fathead minnow)

Bathythermographic data

- D 67 (water temperature, Queen Charlotte Sound, B.C., Vancouver I., B.C.)

Batillaria zonalis (see Snails)

Bay of... (see name of bay)

Beaufort Sea

- D 41 (sediment analysis, zoobenthos)
 76 (water permeability, osmoregulation, isopods, *Mesidotea*)
 A 393 (pollution effects, oil spills, harp seal, ringed seal)

Bedford Basin, N.S.

- J 35(12) : (1604 (sedimentation, suspended matter)
 (12) : 1614 (sedimentation, suspended matter, settling velocity)
 (12) : 1621 (sediments, oxygen consumption, seasonal variations)
 T 762 (primary production, nutrients, experimental data)
 D 55 (biomass, seasonal variations, phytoplankton)
 56 size distribution, chemical composition, suspended matter)
 S 2436 (carbon dioxide, photosynthesis, temporal variations)
 2440 (*Planktoniella sol*, new records)
 2443 (photosynthesis, circadian rhythms, phytoplankton)
 2456 (upwelling, primary production, phytoplankton)

Behavior (see also Feeding behavior; Orientation behavior; Reproductive behavior; Spawning behavior)

- J 35(11) : 1495 (protective behavior, predation, zooplankton)
 M 1457 (beluga, Cunningham Inlet, N.W.T.)
 S 2417 (pheromones, culture tanks, American lobster)
 2486 (toxicity tests, *Gammarus pseudolimnaeus*)

Beluga (*Delphinapterus leucas*)

- M 1457 (aerial surveys, equipment, Cunningham Inlet, N.W.T.)
 S 2395 (progress reports, International Commission on Whaling, N Atl.)
 2398 (progress reports, International Commission on Whaling, arctic)
 2404 (progress reports, International Commission on Whaling, arctic)

Benthos

- J 35(5) : 615 (aromatic hydrocarbons, pollution effects, Norway)
 (5) : 717 (pollution effects, oil spills, Buzzards Bay, Mass.)
 (5) : 745 (pollution effects, oil spills, *Fucus* macrofauna, Gästviken, Sweden)

- (5) : 766 (recolonization, pollution effects, oil pollution, Finland)
- (5) : 776 (recruitment, sediment hydrocarbons, Sequim Bay, Wash.)
- T 738 (samplers, harpacticoid copepods)
- 745 (pollution effects, agricultural runoff, forest industry, Saint John R., N.B.)
- 770 (sampling, cost analysis)
- 782 (intertidal environment, Bay of Fundy)
- M 1431 (surveys, Northumberland Strait, Gulf of St. Lawrence)
- 1462 (check lists, sublittoral zone, St. Croix R. estuary, N.B.)
- 1463 (check lists, sublittoral zone, Musquash R. estuary, N.B.)
- D 92 (sampling, otter trawls, Howe Sound, Bute Inlet, Jervis Inlet, B.C.)
- S 2391 (colonization, man-made stream, Moser Creek, Ont.)
- 2466 (synecology, sublittoral zone)
- Bibliographic information**
- T 764 (index, publications, staff Freshwater Institute, Winnipeg, Man., 1976-77)
- Bibliographies**
- T 732(1) (reproduction, *Abramis* to *Clino-stomus*)
- 732(2) (reproduction, *Clupea* to *Ompok*)
- 732(3) (reproduction, *Oncorhynchus* to *Zygionectes*)
- 743 (eggs, alevins, salmonids)
- M 1458 (*Clariidae*)
- Bioaccumulation**
- J 35(4) : 381 (mercury compounds, rainbow trout)
- (5) : 608 (aromatic hydrocarbons, sediments, bivalves, sipunculid)
- (5) : 657 (aromatic hydrocarbons, English sole)
- (6) : 861 (benzene, larvae, eggs, Pacific herring)
- (7) : 997 (polychlorinated biphenyls, fathead minnow)
- T 737 (hydrocarbons, Atlantic salmon)
- M 1448 (copper compounds, rainbow trout)
- S 2436 (carbon dioxide, temporal variations, phytoplankton, Bedford Basin, N.S.)
- 2442 (aromatics, Atlantic salmon)
- Bioassays**
- J 35(1) : 35 (cadmium, toxicity, goldfish)
- (7) : 1009 (cell culture, viruses, rainbow trout, chinook salmon, fathead minnow)
- T 761 (osmoregulation, chinook salmon, coho salmon)
- S 2469 (growth hormones, mozambique mouth-brooder)
- A 397 (methodology, pulpmill effluents, Pacific salmon)
- Biochemical analysis**
- S 2479 (fatty acids, chromatographic techniques)
- Biochemistry**
- J 35(1) : 117 (stock identification, electrophoresis, proteins, Atlantic cod, Laurentian Channel, Flemish Cap, NW Atl.)
- Biodegradation**
- J 35(5) : 521 (petroleum, weathering, Broughton Strait, B.C.)
- (5) : 573 (bacteria, oil spills, Straits of Magellan, SW Atl.)
- (5) : 585 (petroleum, arctic ecosystems)
- S 2425 (petroleum, bacteria, environmental factors)
- A 357 (petroleum, Eskimo Lakes, N.W.T.)
- Biological collections**
- T 773 (check lists, asteroids, NE Pac.)
- Biometrics**
- S 2475 (parasites, *Anisakis simplex*, NW Atl.)
- Bivalvia**
- J 35(5) : 608 (*Macoma*, *Protothaca*, bioaccumulation, aromatic hydrocarbons, sediments)
- (5) : 643 (enzymes, hydrocarbons, pollution effects)
- Blackcod (*Anoplopoma fimbria*) (see Sablefish)**
- Bloater (*Coregonus hoyi*)**
- J 35(2) : 249 (feeding behavior, L. Michigan)
- Bluegill (*Lepomis macrochirus*)**
- J 35(1) : 12 (competition, food, feeding behavior)
- Bolbosoma (see Acanthocephala)**
- Boron**
- S 2434 (water pollution, toxicity tests, Pacific salmon, Pacific oyster)
- Brassica (see Rapeseed)**
- Breeding (see also Fish culture; Shellfish culture)**
- T 748 (selective breeding, fertility, wild coho salmon, pen-reared coho salmon)
- 781 (natural breeding, seed collection, Pacific oyster, Pendrell Sound, Ladysmith Harbour, Hotham Sound, B.C.)
- M 1454 (Pacific oyster, Hotham Sound, Ladysmith Harbour, B.C.)
- S 2502 (induced breeding, gonadotropin, aquaculture techniques, pink salmon)
- British Columbia (Province), Canada (see also Babine Lake; Fraser River; Georgia, Strait of; Hotham Sound; Howe Sound; Johnstone Strait; Ladysmith Harbour; Queen Charlotte Islands; Queen Charlotte Sound; Queen Charlotte Strait; Skeena River; Thompson River; Vancouver Island)**
- J 35(3) : 305 (nutrients, chlorophylls, Juan de Fuca Strait)

- (5) : 521 (oil spills, Broughton Strait)
 (6) : 797 (population dynamics, predation, juveniles, Pacific salmon)
 (11) : 1492 (population structure, recruitment, fishery development, octopus, Clayoquot Sound)
 MSP 38 (quantitative distribution, eggs, spawning, Pacific herring)
 T 740 (lake enrichment, sockeye salmon)
 744 (spawning grounds, enhancement program, sockeye salmon, Meadow Creek, Kootenay L.)
 765 (chemical composition, seasonal variations, brown alga)
 781 (breeding, seed collection, Pacific oyster, Pendrell Sound, Ladysmith Harbour, Hotham Sound)
 786 (biological plant control, grass carp, Eurasian milfoil, Okanagan Basin lakes)
 787 (chemical composition, organic constituents, seasonal variations, brown alga)
 M 1435 (fishery surveys, abalone, Moresby I.)
 1436 (biological surveys, marine resources, Pacific Rim National Park)
 1437 (fishery surveys, spawning, Pacific herring, Nanoose Bay)
 1438 (body size, seasonal variations, fry, chum salmon, chinook salmon, Nanaimo R.)
 1442 (stock assessment, yield predictions, roe fishery, Pacific herring)
 1443 (fishery data, data storage, documents, Pacific salmon, Pac.Biol. Stn.)
 1446 (fishery surveys, stock assessment, red sea urchin, Tofino)
 1447 (pulpmill effluents, water quality, pollution effects, Pacific salmon, Neroutsos Inlet)
 1452 (rearing, tagging, juveniles, steelhead trout, Fulton R.)
 1453 (rearing, tagging, smolts, chinook salmon, Fulton R.)
 1455 (stock assessment, abalone, Moresby I.)
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 1472 (limnology, watersheds, fishery resources, Lakelse L.)
 D 57 (research programs, tagging, chinook salmon, coho salmon)
 65 (sea level variations, graphs, Alert Bay, Tofino, Point Atkinson, Prince Rupert)
 75 (spawning, eggs, Pacific herring)
 I 105 (processing fishery products, financing, foreign investment)
 S 2413 (development, snail, Fanny Bay)
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 A 376 (fishery resources, roe, Pacific herring, sea urchin, Pacific salmon)
Buccinum undatum (see Whelk)
- Buffers
 J 35(6) : 809 (acidity, sediments, lakes, south-central Ont.)
- Buoyancy
 J 35(3) : 295 (acclimation, water velocity, creek chub)
- By catch
 M 1461 (fishing gear, landing statistics, Atlantic salmon, Nfld., Labrador)
 I 104 (trap nets, snow crab, Gulf of St. Lawrence)
- C
- Cadmium; Cadmium compounds
 J 35(1) : 35 (bioassays, toxicity, goldfish)
 (3) : 286 (sorption, toxicity, diatom)
 (3) : 338 (quantitative distribution, suspended matter, Saguenay fjord, St. Lawrence R. estuary)
 (4) : 409 (polarographic studies, American lobster, oysters, scallops)
 (4) : 446 (pollution effects, predation, fathead minnow, largemouth bass)
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 T 734 (pollution effects, aquatic environment, literature reviews)
- Calibration
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- Callorhinus ursinus* (see Seal, fur)
- Canada
 J 35(1) : 124 (multivariate analysis, meristic counts, morphology, capelin, Atl. coast)
 (3) : 351 (research programs, limnology, long-term changes, perspective)
 (7) : 1017 (fishery management, economics, fishery regulations)
 (7) : 1031 (coastal fisheries, fishery management, sociological aspects, Atl. ocean)
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 39 (human food, fisheries, aquaculture)
 T 750 (aquaculture, research programs, aquaculture production)
 I 98 (fishery management, economics, sociological aspects, harp seal, hooded seal, East coast)
 S 2480 (nonachlor, chlordane, toxicity, aquatic animals, East coast)
 2489 (distribution, population characteristics, walrus)
 A 381 (territorial waters, sea law, environmental factors)
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- Canarygrass, reed (*Phalaris arundinacea*)
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 (4) : 452 (freezing storage, storage effects)
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 S 2450 (pollution effects, hydrocarbons)
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- Carassius auratus* (see Goldfish)
- Carbon; Carbon compounds
 J 35(4) : 422 (isotopes, mathematical models, Great Lakes)
 (8) : 1089 (sedimentation, Char L., N.W.T.)
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 A 354 (food conversion, algae)
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 J 35(8) : 1150 (echo surveys, geographical distribution, population density, humpback whale)
- Carnation Creek, Vancouver Island, B.C.
 J 35(1) : 28 (algal settlements, nutrient enrichment)
- Carp, grass (*Ctenopharyngodon idella*)
 T 786 (biology, literature reviews, plant control, Okanagan Basin lakes, B.C.)
- Catch composition
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 71 (fishery surveys, benthic environment, Strait of Georgia, B.C.)
- Catch/effort (see also Fish catch statistics; Landing statistics)
 J 35(3) : 279 (temperature effects, mathematical models, Atlantic cod, yellowtail flounder, Scotian Shelf, Gulf of Maine, NW Atl.)
 T 736 (groundfish, Pac. coast)
- (fishery data, Arctic char, Labrador) (sport fishing statistics, Atlantic salmon, brook trout, Little Main Restigouche R., N.B.) (sport fishing statistics, Atlantic salmon, brook trout, Cains R., Miramichi R. system, N.B.) Pacific ocean perch, Queen Charlotte Sound, B.C.) (angling, Atlantic salmon, Nfld., Labrador) (experimental fishing, trap nets, whelk, Gulf of St. Lawrence) (demersal fisheries, ICNAF Subarea 2, Division 3K, Divisions 3LNOP)
- Catch statistics (see also Fish catch statistics; Landing statistics)
 A 370 (dolphins, porpoises, whales, World Oceans)
- Catching methods
 J 35(11) : 1485 (stress, rainbow trout)
 T 771 (trap fishing, rock crab, toad crab)
 I 101 (exploratory fishing, midwater trawls, northern pink shrimp, Gulf of St. Lawrence)
- Catfish (*Bagrus docmac*)
 J 35(2) : 197 (yield predictions, mortality rate, yield equation, L. Victoria, Africa)
- Catfish, channel (*Ictalurus punctatus*)
 J 35(4) : 457 (frozen products, quality control, vitamins)
 (10) : 1297 (galvanonarcosis, aquaculture techniques)
- Catfishes, airbreathing (*Clarias* spp.)
 M 1458 (biology, fish culture, bibliographies)
- Catostomidae (see Suckers)
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 J 35(4) : 470 (virology, sheepshead)
 (7) : 1009 (bioassays, viruses, chinook salmon, rainbow trout, fathead minnow)
- Cell, rodlet (*Rhabdospora thelohani*)
 J 35(1) : 101 (morphology, marine fishes, freshwater fishes)
- Cestoda
 J 35(10) : 1356 (new records, *Tetrahobothrius forsteri*, digestive tract, white-sided dolphin)
- Cetacea (see also Dolphins; Porpoises; Whales; also names of species)
 S 2402 (phylogeny)
- Chaetoceros* spp. (see Diatoms)

Chaoborus (*Edwardsops*) *magnificus* (Diptera)
S 2498 (taxonomy, Venezuela)

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Char, Arctic (*Salvelinus alpinus*)
J 35(1) : 48 (activity patterns, seasonal variations, perennial springs, Canning R., Alaska)
(11) : 1488 (feeding behavior, migrations, indicator species, Stanwell-Fletcher L., N.W.T.)
(12) : 1537 (subpopulation, life history, taxonomy, Gros Morne National Park, Nfld.)
T 709 (sewage effluents, toxicity)
733 (monitoring stations, portable weirs, Nfld.)
760 (stock assessment, catch/effort, fishery management, Labrador)

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T 773 (biological collections, asteroids, NE Pac.)
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D 48 (community composition, marine fishes, Strait of Georgia, B.C.)

Chedabucto Bay, N.S.
J 35(5) : 528 (oil spills, aromatic hydrocarbons, sediments)
(5) : 581 (bacteria, hydrocarbons, sediments)
(5) : 630 (chronic oiling, growth, physiology, soft-shell clam)
(5) : 707 (petroleum, pollution effects, intertidal communities)

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T 765 (seasonal variations, brown alga, B.C.)
787 (seasonal variations, brown alga, B.C.)

Chemical pollutants (see Pollutants; Pollution; Pollution effects)

Chemoreception
J 35(7) : 1006 (feeding behavior, predation, American lobster)
S 2424 (pollutants, aquatic animals)

Chilling storage (see Storage)

Chionoecetes opilio (see Crab, snow)
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J 35(2) : 202 (measurement, chloride ion, fishery products)

Chlorine; Chlorine compounds
J 35(1) : 88 (dechlorination, system design, fish culture)
(4) : 477 (ion exchange, gills, rainbow trout)
T 712 (domestic wastes, toxicity, pollution effects, Red R., Man.)

Chlorophylls
J 35(3) : 300 (chlorophyll a, mathematical models, Precambrian lakes, Algonquin Park, Ont.)
(3) : 305 (Juan de Fuca Strait)
T 703 (biomass, fluorescence, Experimental Lakes Area, NW Ont.)
752 (hypolimnion, seasonal variations, fluorometry, Experimental Lakes Area, NW Ont.)
D 45 (monitoring, fluorometry, Experimental Lakes Area, NW Ont.)
74 (Experimental Lakes Area, NW Ont.)
S 2389 (temporal variability, vertical distribution, biomass, chlorophyll a, St. Margaret's Bay, N.S.)
2493 (quantitative distribution, variations, marine environment)

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Chromatographic techniques
S 2479 (biochemical analysis, fatty acids)
2510 (luminescence, indole alkaloids, reed canarygrass)
2513 (fatty acids, chemical properties, separation)

Chub, creek (*Semotilus atromaculatus*)
J 35(3) : 295 (buoyancy, acclimation, water velocity)

Chukchi Sea
J 35(8) : 1130 (aerial surveys, evaluation, Pacific walrus)

Cichlasoma nigrofasciatum (see Cichlid, convict)

Cichlid, convict (*Cichlasoma nigrofasciatum*)
J 35(1) : 143 (tagging, radioisotopes, predation)

Circadian rhythms
J 35(8) : 1152 (simulation, light intensity, laboratory equipment)
S 2443 (photosynthesis, phytoplankton, Bedford Basin, N.S.)

Cisco (*Coregonus artedii*) (see Herring, lake)

Cladocera
J 35(4) : 461 (population dynamics, pollution effects, cadmium, *Daphnia*)

- T 709 (sewage effluents, toxicity, *Daphnia*) Georgia, B.C.)
- Cladophora* (see Aquatic plants)
- Clam, soft-shell (*Mya arenaria*)
- J 35(5) : 630 (growth, physiology, chronic oiling, Chedabucto Bay, N.S.)
- (5) : 637 (petroleum hydrocarbons, pollution effects, respiration)
- (5) : 643 (enzymes, aromatics, metabolism)
- T 687 (quality control, depuration, Digby, N.S.)
- S 2464 (bacteria, analytical techniques, pollution detection, N.S.)
- Clarias* spp. (see Catfishes, airbreathing)
- Clariidae
- M 1458 (biology, bibliographies)
- Clupea harengus harengus* (see Herring, Atlantic)
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- Cod, Atlantic (*Gadus morhua*)
- J 35(1) : 117 (stock identification, biochemistry, geographical distribution, Laurentian Channel, Flemish Cap, NW Atl.)
- CHN 65 (codworm, quantitative distribution, separation)
- Cod, Pacific (*Gadus macrocephalus*)
- T 736 (catch/effort, Pac. coast)
- 753 (freezing storage, storage effects)
- D 78 (fishery surveys, stock assessment, spawning grounds, Vancouver I., B.C.)
- I 94 (stock assessment, production, Hecate Strait, Queen Charlotte Sound, B.C.)
- Codworm (*Phocanema decipiens*) (see Nematoda)
- Colonization
- J 35(5) : 682 (recolonization, aquatic communities, oil spills, Cornwall, Eng.)
- (5) : 766 (recolonization, benthos, oil pollution, Finland)
- S 2391 (benthos, man-made stream, Moser Creek, Ont.)
- Commensalism
- J 35(9) : 1223 (crabs, *Ectocotyla*)
- Computer programs
- T 741 (primary production, annual variations)
- D 68 (water circulation, wind-driven currents, N Pac.)
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- J 35(5) : 499-795 (symposium, oil pollution, northern marine environment)
- A 388 (seawater pollution, sewage effluents)
- Conispora renalis* (Myxosporidia)
- S 2390 (new genus, new species, Strait of Georgia, B.C.)
- Conservation
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- A 371 (dolphins, porpoises, whales, World Oceans)
- Continental Shelf (off N.S.)
- J 35(8) : 1067 (water circulation, hydrodynamics, mathematical models)
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- J 35(10) : 1322 (eggs, development, temperature effects)
- (10) : 1330 (life cycle, body size, mathematical models, Loch Striven, Scotland)
- (10) : 1366 (toxicity tests, heavy metals, cultured organisms, *Acartia*)
- T 738 (samplers, benthos, harpacticoids)
- S 2418 (taxonomy, morphology, *Salmincola cottidarum*)
- 2432 (taxonomy, *S. longimanus*, Siberia)
- 2472 (*Peniculus asinus*, new species, new records, NE Pac.)
- Copper; Copper compounds
- J 35(1) : 141 (water analysis, cupric ion electrode, lakes, Man.)
- T 775 (interstitial environment, sediments, sediment-water interface, Howe Sound, B.C.)
- M 1448 (bioaccumulation, rainbow trout)
- S 2453 (industrial wastes, pollution effects, sediment analysis, Rupert Inlet, Holberg Inlet, Vancouver I., B.C.)
- 2499 (plant control, blue-green alga, Erickson-Elphinstone area, Man.)
- Coregonus artedii* (see Herring, lake)
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- Corrections (Note: Of these references, only those referring to J 35 (but not the actual corrections) are shown after the affected entries under the subject heading in this index)
- J 35(2) : 272 (to J34(5):747; 34(10):1478, 1479, 1794; MSP 22:181; 30:29, 47, 49)
- (8) : 1160 (to J 32(12):2297, 2235, 2353, 2354; 33(5):1204, 1250; 33(6):1274, 1275; 34(5):707, 709; 34(8):1218; 34(9):1357; 34(11):2049, 2053, 2063, 2081, 2082; 35(1):125)
- Cornybacterium* (see Bacteria)
- Cottus cognatus* (see Sculpin, slimy)
- Crab, Dungeness (*Cancer magister*)
- J 35(6) : 833 (age composition, population

- density, mathematical models)
 (10): 1343 (antibiotics, larvae, shellfish culture)
- Crab, rock (*Cancer irroratus*) (Atlantic rock crab)
 J 35(10): 1385 (reproductive behavior)
 T 771 (trap fishing, gear selectivity)
 M 1432 (surveys, biological data, Northumberland Strait, Gulf of St. Lawrence)
- Crab, salt-marsh (*Uca pugnax*)
 J 35(5): 648 (pollution effects, oil spills, West Falmouth, Mass.)
- Crab, snow (*Chionoecetes opilio*) (queen crab; spider crab)
 I 104 (by catch, trap nets, Gulf of St. Lawrence)
- Crab, tanner (*Chionoecetes tanneri*)
 J 35(8): 1141 (lesions, exoskeleton, Ore.)
- Crab, toad (*Hyas araneus*) (spider crab)
 T 771 (trap fishing, gear selectivity)
- Crabs (see also names of species)
 J 35(9): 1223 (commensalism, *Ectocotyla*)
- Crassicauda* (see Nematoda)
- Crassostrea gigas* (see Oyster, Pacific)
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- Cruises (see also Fishery surveys)
 D 48 (G. B. Reed, Pacific hake, walleye pollock, Strait of Georgia, B.C.)
 50 (G. B. Reed, Pacific hake, walleye pollock, Strait of Georgia, B.C.)
 51 (Arctic Harvester, groundfish, Queen Charlotte Sound, B.C.)
 66 (G. B. Reed, GBR 74-1, -2, GBR 75-4, -5, Vancouver I., B.C.)
 71 (G. B. Reed, Pacific hake, walleye pollock, Strait of Georgia, B.C.)
 78 (Arctic Harvester, Pacific cod, Vancouver I., B.C.)
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- Crustacea
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 D 63 (mercury, Howe Sound, B.C.)
- Ctenopharyngodon idella* (see Carp, grass)
- Cunner (*Tautoglabrus adspersus*)
 J 35(5): 665 (pathology, chronic oiling, petroleum)
 (12): 1547 (indicator species, oil pollution, pollution monitoring)
 S 2448 (petroleum, pollution monitoring, enzymes)
 2495 (pollution effects, oil spills, dispersants)
- Cyanides
 J 35(2): 166 (toxicity, embryos, fry, Atlantic salmon)
- Cyanophyta (algae)
 S 2465 (photosynthetic pigments, cytology, taxonomy)
- Cystidicola cristivomeri* (see Nematoda)
- Cystophora cristata* (see Seal, hooded)
- Cytology
 S 2392 (cytological response, darkness, blue-green alga)
 2465 (Cyanophyta)
- Cytoplasm
 J 35(6): 880 (mercury, toxicity, zooplankton, chum salmon)
- D
- Daphnia* (see Cladocera)
- Data collections
 M 1443 (documents, fishery data, data storage, Pacific salmon, Pac.Biol. Stn., B.C.)
- Data processing
 A 377 (telemetry, recording equipment)
 378 (telemetry, recording equipment)
- Data storage
 M 1443 (documents, fishery data, Pacific salmon, Pac.Biol.Stn., B.C.)
- Dead Sea
 S 2457 (hydrocarbons, fats, sediments)
- Degradation
 J 35(2): 247 (leaves, streams)
- Delphinapterus leucas* (see Beluga)
- Delphinus delphis* (see Dolphin, common)
- Demersal fisheries (see also Fisheries)
 J 35(8): 1155 (echo surveys, acoustic equipment, Massachusetts Bay)
 T 736 (catch/effort, groundfish, Pac. coast)
 I 94 (stock assessment, production, Hecate Strait, Queen Charlotte Sound, Vancouver I., B.C.)
- Deoxyribonucleic acid (DNA)
 S 2415 (deoxyribonuclease, testes, chinook salmon)
- Detoxication
 S 2447 (arsenic, marine organisms)
- Detritus
 J 35(2): 247 (leaves, degradation, streams)

- Development (biological)
 J 35(10): 1322 (temperature effects, eggs, copepods)
 (10): 1330 (developmental stages, body size, copepods, Loch Striven, Scotland)
 S 2413 (snail, Fanny Bay, B.C.)
- Diatoms (see also Phytoplankton)
 J 35(2): 257 (*Skeletonema costatum*, *Chaetoceros* spp., plankton dynamics, Vancouver I., B.C.)
 (3): 286 (sorption, arsenic, cadmium, *Asterionella formosa*)
 (4): 479 (metals, toxicity, synergism, Great Lakes)
- Diets (see also Food; Food availability; Food consumption)
 J 35(4): 431 (nutritional requirements, ascorbic acid, rainbow trout)
 (7): 951 (rapeseed proteins, rainbow trout)
 T 767 (rearing, growth, survival, Pacific herring)
 M 1471 (captivity, fur seal)
 S 2410 (herring meal, mercury, poultry)
 2411 (herring meal, mercury, poultry)
 2412 (hormones, food conversion, coho salmon)
 2414 (nutritive value, kelp, hogs)
 2439 (marine fishes, *Anisakis simplex*, experimental infection, mink)
- Digenea (see Trematoda)
- Diptera
 J 35(1): 154 (*Baeoctenus bicolor*, parasites, freshwater molluscs, Morice L., N.B.)
 S 2498 (*Chaoborus*, taxonomy)
- Directories
 MSP 36 (scientific personnel, ocean industry, Canada)
- Diseases; Disease control
 J 35(1): 1 (*Aeromonas salmonicida*, *A. hydrophila*, temperature effects, coho salmon, chinook salmon, steelhead trout)
 (1): 8 (bacterial kidney disease, temperature effects, coho salmon, sock-eye salmon, steelhead trout)
 (2): 261 (gas-bubble disease, developmental stages, steelhead trout)
 (4): 403 (vibriosis, serological studies, fishes, coastal zone, Me.-N.H.)
 (6): 828 (immunology, fluorescent antibody techniques, *Myxosoma cerebralis*)
 (6): 875 (viruses, ozone, salmonids)
 (6): 903 (erythrocytes, viral diseases, Pacific salmon)
 (8): 1141 (lesions, exoskeleton, tanner crab, Ore.)
 (9): 1186 (fluorescent antibody techniques, rainbow trout, *M. cerebralis*)
 (9): 1234 (bacterial kidney disease, brook trout)
 (10): 1290 (pathogens, ozone, recirculating systems)
 (10): 1350 (parasitic mastitis, white-sided dolphin)
 (10): 1376 (*Pseudomonas reptilivora*, bacterial diseases, pathology, mummichog)
 (11): 1451 (IPNV, experimental research, salmonids)
 (11): 1504 (hemolymph, antibodies, bacterial diseases, American lobster)
 (12): 1629 (bacteria, identification, culture media, fishes)
 A 362 (bacterial diseases, gills, Pacific salmon)
- Dispersants
 J 35(5): 682 (oil spills, recolonization, coastal zone, Cornwall, Eng.)
 S 2430 (effectiveness, toxicity, oil spills)
 2495 (pollution effects, cunner)
 2501 (pollution effects, phytoplankton, seaweeds, arctic zone)
- Dispersion
 J 35(5): 563 (petroleum, weathering, littoral zone)
 S 2435 (fenitrothion, environmental effects)
- Distribution
 J 35(1): 117 (geographical, allele variations, Atlantic cod, Laurentian Channel, Flemish Cap, NW Atl.)
 (6): 885 (environmental effects, fishes, Great Lakes)
 (8): 1150 (geographical, echo surveys, humpback whale, Caribbean Sea)
 (9): 1171 (temporal, phytoplankton, St. Lawrence R. estuary)
 (10): 1381 (*Exosphaeroma inornata*, San Juan I., Puget Sound, Calif.)
 MSP 38 (quantitative, eggs, spawning, Pacific herring, B.C.)
 T 742 (ecological associations, zooplankton, phytoplankton, Scotian Shelf)
 747 (geographical, ichthyoplankton, Gulf of St. Lawrence)
 756 (ecological, lingcod, Strait of Georgia, B.C.)
 788 (Pacific salmon, Strait of Georgia, B.C.)
 D 50 (quantitative, Pacific hake, walleye pollock, spiny dogfish, Strait of Georgia, B.C.)
 S 2389 (vertical, temporal variability, biomass, chlorophyll *a*, St. Margaret's Bay, N.S.)
 2460 (geographical, new records, narwhal, Prince Albert Sound, N.W.T.)
 2462 (geographical, new records, northern wolffish, Amundsen Gulf, N.W.T.)
 2463 (geographical, Cetacea, Madeira)
 2473 (geographical, new records, harbor porpoise, Mackenzie R. delta, N.W.T.)
 2481 (stoneflies, southern Man.)
 2489 (walrus, Canada, Greenland)
 2492 (geographical, new records, white pelican, gannet, Victoria I., N.W.T.)

- 2503 (geographical, silver hake, Scotian Shelf)
- Diving
J 35(3) : 332 (sampling, benthic invertebrates, Penobscot R., Me.)
T 738 (samplers, benthos, harpacticoid copepods)
- DNA (see Deoxyribonucleic acid)
- Dogfish, spiny (*Squalus acanthias*)
J 35(6) : 816 (metabolism, energy flow)
D 48 (fishery surveys, Strait of Georgia, B.C.)
50 (fishery surveys, stock assessment, Strait of Georgia, B.C.)
71 (fishery surveys, Strait of Georgia, B.C.)
88 (catch statistics, midwater trawls, Vancouver I., B.C.)
- Dolphin, common (*Delphinus delphis*)
S 2463 (geographical distribution, Madeira)
- Dolphin, white-sided (*Lagenorhynchus acutus*)
J 35(10) : 1350 (parasitic mastitis, limiting factors, reproduction)
(10) : 1356 (helminths, new records, digestive tract)
- Dolphins (Cetacea) (see also names of species)
S 2405 (proposed research, International Commission on Whaling)
A 370 (catch statistics, fishery management, proposed research, World Oceans)
371 (conservation, World Oceans)
- Domestic wastes
T 712 (toxicity, chlorine, Red R., Man.)
A 385 (pollutants, aquatic environment)
- Ducks (Anatidae)
S 2484 (population number, biomass, feeding behavior, Fraser R. delta, B.C.)
- E
- Echo surveys
J 35(8) : 1150 (geographical distribution, population density, humpback whale, Caribbean Sea)
(8) : 1155 (acoustic equipment, demersal fisheries, Massachusetts Bay)
- Economics
I 93 (fishery management, fish-farming, rainbow trout, prairie lakes, Man.)
98 (harp seal, hooded seal, East coast, Canada)
105 (foreign investment, processing fishery products, B.C.)
- Ecosystems
J 35(5) : 585 (oil pollution, arctic)
(12) : 1553 (trophic levels, L. Washington, Wash.)
- Ectocotyla hirudo* (flatworms)
J 35(9) : 1223 (new records, commensalism)
- Ectocotyla multitesticulata* (flatworms)
J 35(9) : 1223 (new species, commensalism)
- Edwardsops* (see *Chaoborus* (*Edwardsops*) *magnificus*)
- Eggs (see also Fish eggs)
J 35(10) : 1322 (development, temperature effects, mathematical models, copepods)
- Embryos
J 35(2) : 166 (toxicity, cyanides, Atlantic salmon)
(2) : 261 (temperature effects, super-saturation, survival, steelhead trout)
- Endocrine glands
J 35(10) : 1285 (pollution effects, chemical pollutants, coho salmon)
S 2470 (growth, morphology, coho salmon)
- Energy budget
J 35(2) : 213 (gonad growth, northern pike, Lac Ste. Anne, Alta.)
(2) : 220 (swimming speed, foraging, body size, marine fishes)
S 2505 (adults, barnacle, NE Pac.)
- Energy flow
J 35(6) : 816 (metabolism, spiny dogfish)
- England
J 35(5) : 682 (oil spills, recolonization, aquatic communities, Cornwall)
- Enterobacter aerogenes* (see Bacteria)
- Environmental effects
J 35(1) : 157 (cage culture, resident largemouth bass, Crystal L., Ark.)
T 749 (power plants, impoundment, Southern Indian L., Man.)
M 1451 (monitoring, pipelines, Alaska)
S 2435 (predictions, fenitrothion, spruce budworm, N.B.)
- Environmental factors
J 35(1) : 145 (sexual maturity, Atlantic salmon)
(11) : 1464 (temperature preference, white perch)
S 2425 (bacterial biodegradation, petroleum)
A 381 (sea law, territorial waters, resource management, Canada)
- Enzymes
J 35(5) : 643 (metabolism, aromatics, bivalves)
(5) : 668 (liver, pollution effects, hydrocarbons, mummichog, Wild Harbor Marsh, Mass.)
(11) : 1485 (blood, rainbow trout)
(12) : 1547 (induced AHH activity, pollution effects, petroleum, cunner)

- S 2415 (deoxyribonuclease, testes, chinook salmon)
 2427 (aldehyde dehydrogenase, *Pseudomonas aeruginosa*)
 2448 (pollution monitoring, petroleum, cunner)
 2450 (pollution monitoring, hydrocarbons, brown trout, capelin)

Eopsetta jordani (see Sole, petrale)

Equipment

- J 35(6) : 901 (samplers, aquatic organisms)
 (6) : 910 (recording equipment, orientation behavior, salinity, gulf killifish)
 (8) : 1152 (laboratory equipment, light intensity, circadian rhythms)
 (11) : 1410 (Secchi disk, water transparency)
 MSP 37 (fishery industry, hydraulics, manuals)
 T 703 (fluorometer, chlorophylls, biomass)
 710 (recording equipment, pH, flow-through systems)
 728 (test equipment, tanks, fishes, aquatic organisms)
 733 (portable weirs)
 738 (samplers, benthos)
 772 (water samplers)
 776 (water samplers, hydrocarbons)
 M 1457 (aerial photography, surveys, beluga)
 S 2397 (ear plug grinder, aging methods, finback whale)
 2419 (automatic feeder, fry, Atlantic salmon)
 2445 (aquaria, air bubbles)
 2467 (tanks, planktonology)
 A 353 (grinder, tissues)
 377 (recording equipment, telemetry, data processing)
 378 (recording equipment, telemetry, data processing)
 CHN 65 (separation, codworm, Atlantic cod)

Erie, Lake, America

- J 35(9) : 1191 (hydraulic engineering, blasting, mortality, freshwater fishes)

Erignathus barbatus (see Seal, bearded)

Erythrocytes (see Diseases; Disease control)

Escapement

- M 1460 (subpopulation, chinook salmon, Fraser R., B.C.)
 D 52 (spawning, Pacific salmon, Queen Charlotte Is., B.C.)
 72 (spawning, Pacific salmon, Queen Charlotte Is., B.C.)

Escherichia coli (see Bacteria)

Esox lucius (see Pike, northern)

Estuaries

- J 35(3) : 305 (cross-channel changes, nutrients, chlorophylls, Juan de Fuca

- Strait)
 T 696 (heavy metals, pollution effects, NE N.B.)
 M 1462 (benthos, check lists, sublittoral zone, St. Croix R. estuary, N.B.)
 1463 (benthos, check lists, sublittoral zone, Musquash R. estuary, N.B.)
 D 90 (catch statistics, Pacific salmon, associated species, Nanaimo R., Strait of Georgia, B.C.)

Eubalaena glacialis (see Whale, right)

Eutrophic lakes; Eutrophication

- J 35(2) : 190 (phosphorus, primary production, Shield lakes, Experimental Lakes Area lakes, NW Ont.)
 M 1466 (phytoplankton, Experimental Lakes Area, NW Ont.)
 S 2485 (hydrology, Experimental Lakes Area, NW Ont.)
 2494 (ions, phytoplankton, variations, Erickson, Man.)
 2512 (metabolism, methane cycle, Man.)

Exosphaeroma (see Isopoda)

Experimental Lakes Area, Northwestern Ontario

- J 35(2) : 190 (phosphorus, primary production, eutrophication)
 T 703 (fluorescence, biomass, chlorophylls)
 752 (hypolimnion, seasonal variations, chlorophylls)
 M 1466 (seasonal variations, ecological succession, phytoplankton)
 D 43 (tritium, diffusion)
 45 (fluorometry, monitoring, chlorophylls)
 73 (light penetration, water transparency)
 74 (primary production, chlorophylls, carbon)
 S 2485 (hydrology, watersheds, eutrophication)
 A 352 (phosphorus, limiting factors, phytoplankton)

Exploitation

- J 35(7) : 945 (fecundity, lake whitefish, lake trout, N.W.T.)
 S 2393 (sperm whale, Blandford, N.S., Trinity Bay, Nfld.)
 2396 (sei whale, Blandford, N.S.)

Exploratory fishing

- D 51 (fishing grounds, groundfish, Queen Charlotte Sound, B.C.)
 I 99 (stock assessment, Dover sole, NE Pac.)
 101 (catching methods, midwater trawls, northern pink shrimp, Gulf of St. Lawrence)

F

Fatigue (biological)

- J 35(3) : 345 (anesthetics, fish handling, chinook salmon)

- (8) : 1124 (toxicity, heavy metals, coho salmon)
 (11) : 1485 (catching methods, rainbow trout)
- Fats; Fatty acids**
 J 35(2) : 213 (lipids, gonad growth, northern pike, Lac Ste. Anne, Alta.)
 (2) : 253 (lipid oxidation, freezing storage, suckers)
 S 2428 (physicochemical properties, rapeseed oil)
 2429 (biochemical analysis, diets, monkey)
 2437 (separation, analytical techniques)
 2457 (hydrocarbons, sediments, Dead Sea)
 2477 (antioxidants, Atlantic mackerel)
 2478 (chemical properties, biosynthesis, harp seal)
 2479 (biochemical analysis, chromatographic techniques)
 2487 (specific gravity, rapeseed oil, canbra oil)
 2507 (diets, docosenoic acids, monkey)
 2508 (diets, fish oil, rats, monkey)
 2513 (fish oils, chemical properties, separation)
- Fecundity**
 J 35(7) : 945 (population dynamics, lake whitefish, lake trout, N.W.T.)
 (9) : 1199 (witch flounder, Grand Bank, St. Pierre Bank, NW Atl.)
 T 748 (fertility, wild coho salmon, pen-reared coho salmon)
- Feeding behavior**
 J 34(1) : 12 (seasonal variations, pumpkinseed, bluegill)
 (2) : 249 (alewife, bloater, lake herring, L. Michigan)
 (3) : 329 (alevins, Atlantic salmon)
 (7) : 971 (circadian rhythms, food rainbow trout)
 (7) : 1006 (chemoreception, vision, American lobster)
 (10) : 1359 (analysis, stomach flushing, salmonids)
 (10) : 1370 (plankton feeders, experimental research)
 (11) : 1488 (indicator species, *Cystidicola cristivomeri*, Arctic char, Stanwell-Fletcher L., N.W.T.)
 (12) : 1597 (daily ration, food consumption, methodology, yellow perch, L. Memphremagog, Que.-Vt.)
 T 777 (estuarine environment, salmonids, La Grande R. system, James Bay)
 788 (Pacific salmon, Strait of Georgia, B.C.)
 S 2484 (ducks, Fraser R. delta, B.C.)
- Financing**
 I 105 (fishery industry, processing fishery products, foreign investment, B.C.)
- Finland**
 J 35(5) : 766 (oil pollution, pollution effects, recolonization, benthos)
- Fish catch statistics; Landing statistics**
 T 736 (catch/effort, groundfish, Pac. coast)
 M 1461 (by catch, fishing gear, Atlantic salmon, Nfld., Labrador)
 D 44 (Pacific herring, Vancouver I., B.C.)
 53 (lake whitefish, Great Slave L., N.W.T.)
 69 (purse seining, sockeye salmon, Babine L., B.C.)
 88 (midwater trawls, Vancouver I., B.C.)
 90 (Pacific salmon, associated species, Nanaimo R., Strait of Georgia, B.C.)
 S 2444 (demersal fisheries, ICNAF Subarea 2, Division 3K, Divisions 3LNOF)
- Fish culture (see also Aquaculture; Aquaculture techniques; also Genetics)**
 J 35(1) : 88 (water purification, dechlorination, system design)
 (1) : 93 (hatcheries, seawater adaptation, parr-smolt transformation, Atlantic salmon)
 (1) : 145 (fish-farming, sexual maturity, population genetics, Atlantic salmon)
 (1) : 157 (cage culture, environmental effects, resident largemouth bass, Crystal L., Ark.)
 (2) : 261 (temperature effects, super-saturation, developmental stages, steelhead trout)
 (3) : 329 (feeding behavior, alevins, Atlantic salmon)
 (3) : 345 (fish handling, anesthetics, chinook salmon)
 (4) : 391 (stocking, survival, brook trout, lakes, Ont.)
 (4) : 403 (serological studies, vibriosis, coastal zone, Me.-N.H.)
 (6) : 822 (nitrite toxicity, therapy, steelhead trout)
 (7) : 951 (diets, rainbow trout)
 T 688 (diets, food conversion, sea water, Atlantic salmon)
 748 (fertility, wild coho salmon, pen-reared coho salmon)
 761 (osmoregulation, chinook salmon, coho salmon)
 766 (aquaculture techniques, incubation, pink salmon)
 779 (aquaculture techniques, salmonids, Norway)
 780 (thermal aquaculture, growth, sockeye salmon)
 M 1448 (rainbow trout, lakes, Man.)
 1452 (rearing, tagging, juveniles, steelhead trout, Fulton R., B.C.)
 1453 (rearing, tagging, smolts, chinook salmon, Fulton R., B.C.)
 1458 (commercial species, airbreathing catfishes)
 D 81 (stocking, production, distribution, salmonids, N.B., N.S., P.E.I.)
 I 93 (fish-farming, economics, feasibility, rainbow trout, prairie lakes, Man.)

- S 2412 (hormones, growth regulators, coho salmon)
 2419 (automatic feeder, fry, Atlantic salmon)
 2470 (growth, morphology, endocrine glands, coho salmon)
 2471 (growth regulators, insulin, coho salmon)
 2482 (predictions, survival, rainbow trout, lakes, Man., Sask.)
 2502 (induced breeding, gonadotropin, aquaculture techniques, pink salmon)
 A 391 (rearing, rainbow trout, Man.)
- Fish eggs
 J 35(1) : 69 (temperature effects, hatching, chinook salmon)
 (2) : 261 (temperature effects, super-saturation, survival, steelhead trout)
 (G) : 861 (benzene, bioaccumulation, Pacific herring)
 (10) : 1316 (respiration, coho salmon)
 MSP 38 (quantitative distribution, spawning, Pacific herring, B.C.)
 T 739 (roe, processing, quality control, Pacific herring)
 743 (bibliographies, salmonids)
 751 (herring roe, Strait of Georgia, B.C.)
 755 (oocytes, developmental stages, Pacific hake)
 M 1442 yield predictions, roe fishery, Pacific herring, B.C.)
 D 75 (biological data, Pacific herring, B.C.)
 A 376 (roe, fishery resources, Pacific herring, Pacific salmon, B.C.)
 CHN 66 (roe, resource development, marketing, Atlantic herring, Maritime Provinces)
- Fish larvae
 J 35(6) : 861 (benzene, bioaccumulation, Pacific herring)
 (7) : 981 (developmental stages, blackgill rockfish, Calif., Baja Calif.)
 (8) : 1116 (water circulation, water exchange, St. Georges Bay, N.S.)
 T 767 (nutritional requirements, growth, survival, Pacific herring)
- Fish oils
 S 2429 (fatty acids, diets, monkey)
 2513 (fatty acids, chemical properties, separation)
- Fisheries
 MSP 39 (human food, resource management, Canada)
 40 (experimental fishing, factory ships, N Atl.)
 M 1449 (sport fishing statistics, catch/effort, age composition, walleye, Hay R., N.W.T.)
 T 760 (fishery data, catch/effort, Atlantic salmon, Arctic char, Labrador)
- D 53 (catch statistics, lake whitefish, Great Slave L., N.W.T.)
 I 105 (financing, processing fishery products, foreign investment, B.C.)
 S 2393 (sperm whale, N.S., Nfld.)
 2396 (sei whale, N.S.)
 2399 (minke whale, Nfld.)
 A 370 (catch statistics, fishery management, dolphins, porpoises, whales, World Oceans)
 384 (stock assessment, fishery management, NW Atl.)
- Fisheries Research Board of Canada
 J 34 2441-2550 (1977 subject, author index, list of publications)
 T 764 (index, publications, staff Freshwater Institute, Winnipeg, Man., 1976-77)
- Fishery management
 J 35(1) : 28 (habitat improvement, Carnation Creek, Vancouver I., B.C.)
 (2) : 208 (mathematical models, fishery research, optimal control)
 (2) : 229 (mathematical models, potential yield, recruitment, Atlantic mackerel, NW Atl.)
 (2) : 235 (mathematical models, regional development, Pacific salmon, Kemano II, Skeena R., B.C.)
 (6) : 916 (perspectives, Ont.)
 (7) : 1017 (economics, fishery regulations, Canada)
 (7) : 1031 (coastal fisheries, sociological aspects, Atl. ocean, Canada)
 (12) : 1572 (introduced species, kokanee, opossum shrimp, L. Tahoe, Calif.-Nev.)
 T 760 (mathematical models, Arctic char, Labrador)
 784 (Pacific herring, NE Pac.)
 D 69 (juveniles, sockeye salmon, Babine L., B.C.)
 I 98 (economics, sociological aspects, harp seal, hooded seal, East coast, Canada)
 A 361 (population dynamics, historical review)
 370 (proposed research, dolphins, porpoises, whales, World Oceans)
 384 (stock assessment, groundfish, NW Atl.)
- Fishery products (see also Processing fishery products)
 J 35(2) : 202 (chloride ion, electroanalysis)
 (7) : 976 (chemical analysis, organoleptic properties, storage effects, capelin) (herring roe, Strait of Georgia, B.C.)
 T 751 (frozen products, storage effects, temperature effects)
 774 (storage effects, minced products, fish)
 S 2368 (frozen products, nutritive value, market research)
 2407 (minced products, freezing storage, proteins, flatfishes, red hake)
 2408

- S 2451 (minced products, quality control, American lobster)
 2459 (selenium, spectrophotometry)
 A 363 (processing, human food, capelin)
 364 (quality control)
- Fishery regulations**
 S 2388 (size-limit regulations, sperm whale)
- Fishery resources**
 M 1472 (Lakelse L., B.C.)
 A 366 (availability, Nfld.)
 367 (quota regulations, redfish, Gulf of St. Lawrence)
 376 (roe, Pacific herring, sea urchins, Pacific salmon, B.C.)
- Fishery surveys**
 T 747 (identification, distribution, abundance, ichthyoplankton, Gulf of St. Lawrence)
 789 (abalone, seaweeds, Queen Charlotte Strait, Johnstone Strait, B.C.)
 M 1432 (lobster, sea scallop, rock crab, sea urchin, Northumberland Strait, Gulf of St. Lawrence)
 1435 (population density, size distribution, abalone, Moresby I., B.C.)
 1437 (spawning, spawning grounds, Pacific herring, Nanoose Bay, B.C.)
 1446 (stock assessment, red sea urchin, Tofino, B.C.)
 1447 (beach seines, Pacific salmon, Neroutsos Inlet, B.C.)
 D 42 (biomass, catch/effort, Pacific ocean perch, Queen Charlotte Sound, B.C.)
 44 (Pacific herring, Vancouver I., B.C.)
 48 (Pacific hake, walleye pollock, Strait of Georgia, B.C.)
 50 (stock assessment, Pacific hake, walleye pollock, Strait of Georgia, B.C.)
 66 (midwater trawls, catch composition, marine fishes, Pacific herring, Vancouver I., B.C.)
 71 (walleye pollock, Pacific hake, Strait of Georgia, B.C.)
 78 (stock assessment, spawning grounds, Pacific cod, Vancouver I., B.C.)
 88 (fish catch statistics, midwater trawls, Vancouver I., B.C.)
 I 99 (stock assessment, Dover sole, NE Pac.)
- Fishing vessels**
 MSP 40 (factory ships, trawlers, N Atl.)
 CHN 67 (human food, convenience food, frozen products)
- Fishways**
 S 2488 (hydraulic models, migrations, Mackenzie R. valley, N.W.T.)
- Flatfishes (Pleuronectiformes)**
 S 2408 (minced products, freezing storage, proteins)
- Flounder, witch (*Glyptocephalus cynoglossus*)**
 J 35(9) : 1199 (fecundity, Grand Bank, St. Pierre Bank, NW Atl.)
 S 2449 (storage effects, chilling storage, organoleptic properties)
- Fluorescence**
 J 35(6) : 828 (fluorescent antibody techniques, *Myxosoma cerebrales*)
 (9) : 1186 (fluorescent antibody techniques, *M. cerebrales*, rainbow trout)
- Fluorine; Fluorine compounds**
 J 35(11) : 1500 (pollution effects, fluoride, growth, phytoplankton)
- Food; Food availability; Food consumption**
 J 35(1) : 12 (interspecific competition, pumpkinseed, bluegill)
 (1) : 136 (predation, analysis)
 (3) : 315 (phosphorus, algae, L. Memphremagog, Que.-Vt.)
 (10) : 1359 (analysis, stomach flushing, salmonids)
 (12) : 1597 (methodology, daily ration, yellow perch, L. Memphremagog, Que.-Vt.)
 T 777 (seasonal variations, salmonids, La Grande R. system, James Bay)
- Food chains; Food webs**
 J 35(12) : 1553 (secondary production, L. Washington, Wash.)
 S 2446 (arsenic, aquatic environment, literature reviews)
 2447 (arsenic, chemical reactions, marine organisms)
- Food conversion**
 T 688 (nutrients, proteins, Atlantic salmon)
 A 354 (organic suspended matter, nutrients)
- Fraser River, B.C.**
 M 1460 (scale reading, subpopulation, escapement, chinook salmon)
 S 2421 (oceanodromous migrations, ultrasonic tracking, sockeye salmon)
 2438 (pollutants, pulp mill effluents, Pacific salmon)
 2484 (population number, biomass, feeding behavior, ducks, delta)
- Freezing storage (see Storage; Storage effects)**
- Freshwater fishes (see also names of fishes)**
 J 35(6) : 885 (population density, horizontal distribution, echo surveys, Great Lakes)
 (9) : 1191 (mortality causes, hydraulic engineering, blasting, L. Erie)
- Freshwater lakes**
 J 35(12) : 1532 (phosphorus retention, mathematical models)
 S 2509 (arsenic, solubility, North America)

- Frobisher Bay, Canada
A 356 (seasonal variations, marine ecology)
- Frozen products
J 35(2) : 253 (lipid oxidation, suckers)
(4) : 457 (quality control, vitamins, diets, channel catfish)
T 774 (fishery products, temperature effects, weight loss)
S 2386 (storage effects, minced products, fish)
2407 (fishery products, nutritive value, market research)
2408 (proteins, minced products, red hake, flatfishes)
CHN 67 (human food, convenience food, fishing vessels)
- Fry
J 35(2) : 166 (toxicity, cyanides, Atlantic salmon)
(2) : 261 (temperature effects, super-saturation, survival, steelhead trout)
M 1438 (body size, growth, seasonal variations, chum salmon, chinook salmon, Nanaimo R., B.C.)
S 2419 (automatic feeder, Atlantic salmon)
- Fucus (see Seaweeds)
- Fundulus grandis (see Killifish, gulf)
heteroclitus (see Mummichog)
- Fundy, Bay of (N.B.-N.S.)
T 782 (sediment analysis, benthos, intertidal environment)
S 2420 (otolith growth, Atlantic herring)
- Furunculosis (*Aeromonas*) (see Diseases; Disease control)
- G
- Gadus macrocephalus* (see Cod, Pacific)
morhua (see Cod, Atlantic)
- Gammarus* (see Amphipoda)
- Gannet (*Morus bassanus*)
S 2492 (new records, geographical distribution, Victoria I., N.W.T.)
- Gastropoda (see Snails)
- Gear selectivity
T 768 (trawl nets, fishing power, statistical analysis, rockfishes, Queen Charlotte Sound, B.C.)
- Genera, new (see New genera)
- Genetics (see also Fish culture)
J 35(1) : 117 (allele variations, Atlantic cod, Laurentian Channel, Flemish Cap, NW Atl.)
(5) : 624 (ecological genetics, pollution effects, oil pollution, oyster drill)
- S 2474 (polymorphism, enzymes, Atlantic salmon, Ireland)
- Geographical distribution (see Distribution)
- Georgia, Strait of, B.C.
T 713 (ocean dumping, pollution monitoring, underwater photography)
746 (identification keys, field characters, Pacific salmon)
751 (herring roe, fishery products)
756 (life history, developmental stages, ecological distribution, lingcod)
788 (abundance, distribution, feeding behavior, Pacific salmon)
D 48 (fishery surveys, Pacific hake, walleye pollock, spiny dogfish)
50 (fishery surveys, stock assessment, Pacific hake, walleye pollock, spiny dogfish)
71 (fishery surveys, catch composition, benthic environment)
90 (catch statistics, Pacific salmon, associated species, intertidal environment, Nanaimo R.)
S 2390 (new genus, new species, *Conispora renalis*)
- Globicephala macrorhyncha* (see Whale, short-finned pilot)
melaena (see Whale, pilot)
- Glyptocephalus cynoglossus* (see Flounder, witch)
- Goldfish (*Carassius auratus*)
J 35(1) : 35 (toxicity, cadmium)
- Gonyaulax* (see Poisons (biological))
- Grand Bank (off Nfld.)
J 35(9) : 1199 (fecundity, witch flounder)
- Grazing
M 1446 (herbivores, red sea urchin, algae, Tofino, B.C.)
- Great Central Lake, Vancouver Island, B.C.
J 35(6) : 851 (stock assessment, echo surveys, habitat improvement, sockeye salmon)
(12) : 1580 (habitat improvement, sockeye salmon)
- Great Lakes, America (see also Erie, Lake; Michigan, Lake; Ontario, Lake; Superior, Lake)
J 35(4) : 422 (carbon isotopes, mathematical models)
(4) : 479 (water quality, metals, toxicity, algae, diatoms)
(6) : 885 (population density, horizontal distribution, environmental effects, fishes)
(9) : 1262 (ichthyocides, sea lamprey)
- Great Slave Lake, N.W.T.
D 53 (catch statistics, monitoring, lake whitefish)

- Greenland
S 2489 (distribution, population characteristics, walrus)
- Growth
J 35(1) : 60 (sea growth, river growth, juveniles, Atlantic salmon, Western Arm Brook, Nfld.)
(5) : 630 (pollution effects, chronic oiling, soft-shell clam, Chedabucto Bay, N.S.)
(5) : 650 (pollution effects, chronic oiling, *Mesidotea entomon*)
(11) : 1479 (growth curves, mathematical models, seasonal variations)
T 780 (temperature effects, biological rhythms, sockeye salmon)
M 1434 (allopatric populations, sympatric populations, cutthroat trout, Vancouver I., B.C.)
1438 (seasonal variations, fry, chum salmon, chinook salmon, Nanaimo R., B.C.)
1445 (growth curves, mortality, American lobster)
S 2420 (otoliths, Atlantic herring, Bay of Fundy)
2469 (growth hormones, mozambique mouth-brooder, sockeye salmon)
2470 (abnormalities, endocrine glands, juveniles, coho salmon)
2503 (silver hake, Scotian Shelf)
- Growth regulators
S 2412 (hormones, coho salmon)
2471 (hormones, insulin, coho salmon)
- Guillemot (*Uria aalge*)
J 35(5) : 695 (oil removal, conservation)
- Gulf of... (see name of gulf)
- Gull, herring (*Larus argentatus*)
J 35(11) : 1401 (indicator species, chemical pollutants, L. Ontario)
- H
- Habitat
J 35(2) : 175 (spatial relations, Atlantic salmon, Miramichi R., Nashwaak R., N.B.)
- Habitat improvement (fertilization)
J 35(6) : 851 (production, sockeye salmon, Great Central L., Vancouver I., B.C.)
(12) : 1580 (trophic levels, sockeye salmon, Great Central L., Vancouver I., B.C.)
T 740 (lake enrichment, sockeye salmon, B.C.)
- Hake, Pacific (*Merluccius productus*)
T 755 (oocytes, eggs, developmental stages)
D 48 (fishery surveys, Strait of Georgia, B.C.)
50 (fishery surveys, stock assessment, Strait of Georgia, B.C.)
71 (fishery surveys, Strait of Georgia, B.C.)
- 88 (catch statistics, midwater trawls, Vancouver I., B.C.)
S 2390 (endoparasites, kidney, *Conispora renalis*, Strait of Georgia, B.C.)
- Hake, red (*Urophycis chuss*)
S 2408 (minced products, freezing storage, proteins)
- Hake, silver (*Merluccius bilinearis*)
S 2503 (age composition, geographical distribution, Scotian Shelf)
- Halichoerus grypus* (see Seal, grey)
- Haliotis kamtschatkana* (see Abalone)
- Hamell Lake, Sask.
J 35(7) : 963 (heavy metals, pollution effects, white sucker)
- Heart
S 2508 (mitochondrial oxidation, fatty acids, rats, monkey)
- Heat transfer
S 2423 (gills, body walls, fishes)
- Heavy metals (see also Pollutants; Pollution; Pollution effects)
J 35(7) : 963 (pollution effects, fatigue, white sucker, Hamell L., Sask.)
(8) : 1124 (toxicity, coho salmon)
(10) : 1366 (toxicity tests, cultured organisms, calanoid copepod)
(11) : 1482 (chemical reactions, phytoplankton, Heney L., Que.)
T 696 (pollution effects, estuaries, NE N.B.)
- Herbicides
S 2504 (soils, chemical analysis, analytical techniques)
- Herring, Atlantic (*Clupea harengus harengus*)
J 35(1) : 148 (PEN, ultrastructure)
S 2420 (otolith growth, Bay of Fundy)
2458 (avoidance, pulp mill effluents)
2475 (parasites, *Anisakis simplex*, NW Atl.)
CHN 64 (processing fishery products, thawing)
66 (roe, resource development, marketing, Maritime Provinces)
- Herring, lake (*Coregonus artedii*) (cisco)
J 35(2) : 249 (feeding behavior, L. Michigan)
(11) : 1457 (larvae, predation, rainbow smelt, L. Superior)
T 777 (feeding behavior, estuarine environment, coastal zone, La Grande R. system, James Bay)
- Herring, Pacific (*Clupea harengus pallasii*)
J 35(4) : 473 (chilling storage, quality control, NE Pac.)
(6) : 861 (benzene, eggs, larvae)
MSP 38 (eggs, quantitative distribution, spawning, B.C.)
T 739 (roe, processing, quality control)

- 751 (roe, fishery products, Strait of Georgia, B.C.)
- 767 (larvae, diets, rearing)
- 784 (population dynamics, fishery management, NE Pac.)
- M 1430 (spawning grounds, vegetation charts, Nuchatlitz, Nootka Sound, Hesquiat Harbour, Barkley Sound, Vancouver I., B.C.)
- 1433 (spawning grounds, vegetation charts, Ganges Harbour, Vancouver I., B.C.)
- 1437 (fishery surveys, spawning, spawning grounds, Nanoose Bay, B.C.)
- 1442 (stock assessment, yield predictions, roe fishery, B.C.)
- D 44 (fishery surveys, catch statistics, Vancouver I., B.C.)
- 66 (fishery surveys, midwater trawls, population structure, Vancouver I., B.C.)
- 75 (spawning, eggs, B.C.)
- 88 (catch statistics, midwater trawls, Vancouver I., B.C.)
- A 376 (fishery resources, roe, B.C.)
- Histochemistry
- J 35(4) : 381 (mercury compounds, rainbow trout)
- Histology
- J 35(8) : 1060 (toxicity, naphthalene, mummichog)
- Hogs
- S 2414 (diets, nutritive value, kelp)
- Homarus americanus* (see Lobster, American)
- Horizontal distribution (see Distribution)
- Hormones
- J 35(8) : 1124 (biological fatigue, heavy metals, coho salmon)
- (11) : 1423 (ovulation, oocyte maturation, coho salmon)
- S 2412 (growth regulators, food conversion, coho salmon)
- 2469 (growth regulators, mozambique mouthbrooder, sockeye salmon)
- 2471 (growth regulators, insulin, coho salmon)
- 2502 (gonadotropin, induced breeding, sexual maturity, pink salmon)
- Hotham Sound, B.C.
- T 781 (breeding, seed collection, Pacific oyster)
- M 1454 (breeding, seed collection, Pacific oyster)
- Howe Sound, B.C.
- T 763 (mercury, marine organisms, pollution monitoring)
- 775 (interstitial environment, copper, sediments)
- D 63 (mercury, marine crustaceans, marine fishes)
- 92 (sampling, otter trawls, pollution effects, invertebrates, fishes)
- Human food
- MSP 39 (fisheries, aquaculture, resource management, Canada)
- S 2407 (nutritive value, frozen fishery products)
- 2416 (arsenic compounds, marine organisms)
- 2500 (mercury compounds, selenium, swordfish, NW Atl.)
- A 363 (processing fishery products, capelin)
- CHN 67 (convenience food, frozen products, fishing vessels)
- Hyas araneus* (see Crab, toad)
- Hydraulic engineering
- J 35(9) : 1191 (mortality causes, blasting, freshwater fishes, L. Erie)
- Hydraulic structures
- S 2488 (fishways, hydraulic models, migrations, Mackenzie R. valley, N.W.T.)
- Hydraulics
- MSP 37 (fishery industry equipment, manuals)
- Hydrocarbons (see also Pollutants; Pollution; Pollution effects)
- J 35(5) : 510 (aromatics, sediments, Buzzards Bay, Mass.)
- (5) : 528 (aromatics, sediments, Chedabucto Bay, N.S.)
- (5) : 552 (petroleum, weathering, sediment analysis, Searsport, Me.)
- (5) : 581 (bacteria, sediments, Chedabucto Bay, N.S.)
- (5) : 608 (aromatics, bioaccumulation, bivalves, sipunculid)
- (5) : 615 (aromatics, pollution effects, benthos, Norway)
- (5) : 637 (petroleum, pollution effects, respiration, soft-shell clam)
- (5) : 643 (aromatics, enzymes, metabolism, bivalves)
- (5) : 657 (aromatics, bioavailability, English sole)
- (5) : 668 (pollution effects, enzymes, liver, mummichog, Mass.)
- (5) : 776 (sediments, recruitment, benthos, Sequim Bay, Wash.)
- (6) : 861 (benzene, eggs, larvae, Pacific herring)
- (8) : 1060 (naphthalene, toxicity, mummichog)
- T 737 (bioaccumulation, excretion, Atlantic salmon)
- 776 (water analysis, analytical techniques, water samplers)
- S 2442 (aromatics, bioaccumulation, excretion, Atlantic salmon)
- 2457 (fats, sediments, Dead Sea)
- 2476 (sediment analysis, chemical composition, Scotian Shelf)
- 2512 (methane cycle, eutrophic lakes, Man.)

Hydrodynamics

- J 35(8) : 1067 (mathematical models, continental shelf, continental slope, N.S.)

Hydrogen isotopes

- D 43 (tritium, diffusion, Experimental Lakes Area, NW Ont.)

Hydrology

- S 2485 (watersheds, Experimental Lakes Area, NW Ont.)

Hyperoodon ampullatus (see Whale, bottlenose)

Hypolimnion

- T 752 (chlorophylls, seasonal variations, Experimental Lakes Area, NW Ont.)

I

Ichthyocides

- J 35(9) : 1262 (chemical control, sea lamprey, Great Lakes)

Ichthyoplankton

- J 35(12) : 1518 (community composition, ecological distribution, population number, St. Lawrence R. estuary)
T 747 (geographical distribution, abundance, identification, Gulf of St. Lawrence)

Ictalurus punctatus (see Catfish, channel)

Identification keys

- T 746 (Pacific salmon, marine environment)

IHNIV (infectious hematopoietic necrosis virus) (see Viruses)

Immunology

- J 35(6) : 828 (antibodies, fluorescence, serological studies, *Myxosoma cerebralis*)
(6) : 871 (osmosis, antigens, limiting factors, rainbow trout)

Incubation

- J 35(1) : 69 (temperature effects, eggs, chinook salmon)
T 766 (aquaculture techniques, production, pink salmon)

Indicator species

- J 35(11) : 1401 (chemical pollutants, coho salmon, herring gull, L. Ontario)
S 2475 (*Anisakis simplex*, host stocks, Atlantic salmon, Atlantic herring, NW Atl.)

Industrial wastes (see also Pollutants; Pollution; Pollution effects)

- J 35(2) : 166 (toxicity, cyanides, Atlantic salmon)
(10) : 1388 (pulpmill effluents, toxicity, seasonal variations, rainbow trout)
T 730 (pulpmill effluents, resin acids,

analytical techniques)

- T 758 (pulpmill effluents, sewage effluents, algae, Thompson R., B.C.)
M 1447 (pulpmill effluents, pollution effects, water quality, Neroutsos Inlet, B.C.)
S 2438 (pulpmill effluents, toxicity, detoxication, Fraser R., B.C.)
2453 (copper, Holberg Inlet, Rupert Inlet, Vancouver I., B.C.)
2458 (pulpmill effluents, chemical composition)
2515 (pulpmill effluents, pollution effects, reproductive behavior, *Anisogammarus pugettensis*)
A 385 (pollutants, aquatic environment)
397 (pulpmill effluents, pollution effects, bioassays, Pacific salmon)

Industries

- T 745 (forest industry, pollution effects, brook trout, slimy sculpin, benthos, Saint John R., N.B.)
M 1473 (forest industry, operations research, Queen Charlotte Is., B.C.)

Insecticides (see Pesticides)

International Commission for the Northwest Atlantic Fisheries (ICNAF)

- S 2444 (catch statistics, demersal fisheries, Subarea 2, Division 3K, Divisions 3LNOP)

Interspecific relationships

- J 35(1) : 12 (competition, food, habitat, pumpkinseed, bluegill)
(1) : 131 (reproductive behavior, habitat, pumpkinseed, longear sunfish, Thames R., Ont.)
(12) : 1572 (introduced species, kokanee, opossum shrimp, L. Tahoe, Calif.-Nev.)
M 1434 (sympatric populations, cutthroat trout, Vancouver I., B.C.)
1435 (competition, abalone, red sea urchin, Moresby I., B.C.)

Intertidal environment

- J 35(5) : 707 (pollution effects, petroleum, Chedabucto Bay, N.S.)
(5) : 754 (oil spills, pollution effects, Wreck Cove, Wash.)
T 782 (physicochemical properties, Bay of Fundy)

Introduced species

- J 35(10) : 1373 (sexual maturity, spawning, pink salmon, L. Superior)
(12) : 1572 (kokanee, opossum shrimp, L. Tahoe, Calif.-Nev.)

Invertebrates

- J 35(3) : 332 (sampling, Penobscot R., Me.)
(5) : 731 (oil spills, pollution effects, salt marsh, Bourne, Mass.)
A 358 (petroleum, pollution effects, arctic)

- Ion exchange
J 35(4) : 477 (chlorine, gills, rainbow trout)
- Ions
J 35(1) : 141 (water analysis, cupric ion electrode, lake, Man.)
(2) : 202 (chloride ion, measurement, fishery products)
(7) : 1012 (ammonia, environmental effects, seawater)
S 2416 (arsenic compounds, measurement, fish, shellfish)
2494 (variations, composition, saline eutrophic lakes, Erickson, Man.)
- IPNV (infectious pancreatic necrosis virus) (see Viruses)
- Ireland
S 2474 (polymorphism, enzymes, Atlantic salmon)
- Irradiation
S 2514 (processing fishery products, Atlantic mackerel)
- Isochrysis (see Algae)
- Isopoda
J 35(5) : 650 (pollution effects, chronic oiling, *Mesidotea entomon*)
(10) : 1381 (*Exosphaeroma inornata*, *E. media*, taxonomy, phenotypes)
D 76 (osmoregulation, water permeability, S Beaufort Sea)
- Isotopes
J 35(1) : 143 (tagging, convict cichlid)
35(4) : 422 (carbon, Great Lakes)
D 43 (tritium, diffusion, Experimental Lakes Area, NW Ont.)
- J
- James Bay, Canada
T 777 (feeding behavior, estuarine environment, coastal zone, salmonids, La Grande R. system)
- Johnstone Strait, B.C.
T 789 (fishery surveys, abalone, seaweeds)
- Juveniles
J 35(7) : 981 (developmental stages, blackgill rockfish, Calif., Baja Calif.)
M 1452 (tagging, steelhead trout, Fulton R., B.C.)
- K
- Keys, identification (see Identification keys)
- Killifish, gulf (*Fundulus grandis*)
J 35(6) : 910 (orientation behavior, salinity, recording equipment)
- Kogia breviceps* (see Whale, pigmy sperm)
- Kokanee (*Oncorhynchus nerka*) (see Salmon, sock-eye)
- L
- Labrador, Nfld.
T 760 (stock assessment, catch/effort, fishery management, Arctic char)
M 1461 (by catch, fishing gear, landing statistics, Atlantic salmon)
D 84 (catch/effort, angling, Atlantic salmon)
- Labrador Sea
D 83 (primary production, phytoplankton, nutrients)
- Ladysmith Harbour, B.C.
T 781 (breeding, seed collection, Pacific oyster)
M 1454 (breeding, seed collection, Pacific oyster)
- Lagenorhynchus acutus* (see Dolphin, white-sided)
- Laminaria* (see Seaweeds)
- Lamprey, sea (*Petromyzon marinus*)
J 35(9) : 1262 (ichthyocides, chemical control, Great Lakes)
- Lampricides (see Ichthyocides)
- Landing statistics (see Fish catch statistics)
- Larus argentatus* (see Gull, herring)
- Lead
J 35(3) : 338 (quantitative distribution, suspended matter, Saguenay fjord, St. Lawrence R. estuary)
(4) : 437 (toxicity, blood, pH, rainbow trout)
(8) : 1109 (toxicity, freshwater snails)
- Lepidopsetta bilineata* (see Sole, rock)
- Lepomis gibbosus* (see Pumpkinseed)
macrochirus (see Bluegill)
megalotis (see Sunfish, longear)
- Leptomedusa (*Phialidium gregarium*)
J 35(2) : 257 (medusa predation, population dynamics, plankton, Saanich Inlet, Vancouver I., B.C.)
- Lesions
J 35(8) : 1141 (exoskeleton, tanner crab, Ore.)
- Lethal limits (see Toxicants; Toxicity; Toxicity tests)
- Life cycle; Life history
J 35(9) : 1165 (*Mysis relicta*, L. Michigan)
(10) : 1330 (mathematical models, copepods, Loch Striven, Scotland)
(11) : 1469 (subpopulation, American shad, NW Atl.)

- (12): 1537 (subpopulation, Arctic char, Gros Morne National Park, Nfld.)
 T 756 (developmental stages, ecological distribution, lingcod, Strait of Georgia, B.C.)
- Light intensity
 J 35(8) : 1152 (simulation, circadian rhythms, laboratory equipment)
- Light penetration
 D 73 (Experimental Lakes Area, NW Ont.)
- Limnology
 J 35(3) : 351 (research programs, long-term changes, Canada, perspective)
 M 1472 (watersheds, Lakelse L., B.C.)
 D 43 (diffusion, tritium, Experimental Lakes Area, NW Ont.)
 47 (lakes, N.S.)
 64 (water quality, Sherbrooke L., N.S.)
 73 (light penetration, Experimental Lakes Area, NW Ont.)
 S 2452 (paleolimnology, phytoplankton, Babine L., B.C.)
- Lingcod (*Ophiodon elongatus*)
 T 756 (life history, developmental stages, ecological distribution, Strait of Georgia, B.C.)
 I 94 (stock assessment, production, Hecate Strait, Queen Charlotte Sound, B.C.)
- Lipids (see Fats; Fatty acids)
- Literature reviews
 J 35(1) : 101 (rodlet cell, fishes)
 T 734 (cadmium, pollution effects, aquatic environment)
 740 (lake enrichment, sockeye salmon, B.C.)
 786 (biology, grass carp)
 S 2496 (environmental effects, terpenoids)
 A 380 (marine pollution, pollution control, World Oceans)
- Lobster, American (*Homarus americanus*)
 J 35(4) : 409 (cadmium, polarographic studies)
 (7) : 1006 (feeding behavior, chemo-reception, vision)
 (11) : 1504 (antibodies, bacterial diseases)
 M 1432 (surveys, biological data, Northumberland Strait, Gulf of St. Lawrence)
 1445 (yield predictions, mathematical models, growth)
 S 2417 (behavior, pheromones, culture tanks)
 2451 (minced products, quality control)
 2468 (larvae, rearing, feeding)
- Locomotion
 J 35(2) : 220 (swimming speed, foraging, body size, marine fishes)
 (11) : 1417 (acceleration, temperature effects, rainbow trout)
- Luminescence
 S 2510 (indole alkaloids, reed canarygrass)
- Lymnaea* (see Snails)
- M
- Macaca fascicularis* (see Monkey)
- Mackenzie River, N.W.T.
 S 2473 (new records, geographical distribution, harbor porpoise, Mackenzie R. delta)
 2488 (culverts, fishways, migrations, Mackenzie R. valley)
 A 359 (environmental surveys, Mackenzie R. delta)
- Mackerel, Atlantic (*Scomber scombrus*)
 J 35(2) : 229 (mathematical models, potential yield, NW Atl.)
 S 2477 (fats, antioxidants, preservation fishery products)
 2514 (processing fishery products, irradiation)
- Macoma* (see Bivalvia)
- Macrocystis integrifolia* (see Alga, brown)
- Madeira
 S 2463 (new records, geographical distribution, Cetacea)
- Magellan, Straits of, Southwest Atlantic Ocean
 J 35(5) : 573 (oil spills, biodegradation, bacteria)
- Maine-New Hampshire, USA
 J 35(4) : 403 (vibriosis, serological studies, fishes, coastal zone)
- Maine State, USA
 J 35(1) : 76 (oceanodromous migrations, smolts, Atlantic salmon, Penobscot R. estuary)
 (3) : 332 (sampling, benthic invertebrates, Penobscot R.)
 (5) : 552 (oil spills, sediments, weathering, Searsport)
- Mallotus villosus* (see Capelin)
- Manitoba (Province), Canada (see also Red River)
 J 35(1) : 141 (water analysis, cupric ion electrode, lakes)
 T 749 (ATP indicator, plankton biomass, impoundment, Southern Indian L.)
 I 93 (fish-farming, economics, rainbow trout, prairie lakes)
 S 2481 (distribution, stoneflies)
 2482 (aquaculture, survival, rainbow trout, lakes)
 2494 (ions, phytoplankton, saline eutrophic lakes, Erickson)
 2499 (copper compounds, plant control, blue-green alga, Erickson-Elphinstone area)

- 2512 (methane cycle, metabolism, eutrophic lakes)
- A 391 (aquaculture techniques, rearing, rainbow trout)
- Manuals
- MSP 37 (hydraulics, fishery industry equipment)
- Marine aquaculture (see Aquaculture)
- Marine ecology
- A 356 (seasonal variations, Frobisher Bay, N.W.T.)
- Marine fishes (see also names of species)
- T 763 (pollution monitoring, mercury, Howe Sound, B.C.)
- M 1431 (demersal fishes, surveys, Northumberland Strait, Gulf of St. Lawrence)
- D 63 (mercury, Howe Sound, B.C.)
- S 2416 (arsenic compounds, measurement, analytical techniques)
- Marine mammals (see also Aquatic mammals; also names of species)
- Marine organisms
- A 379 (monitoring programs, World Oceans)
- Marine parks
- M 1436 (biological surveys, marine resources, Pacific Rim National Park, B.C.)
- 1467 (biological surveys, marine resources, Pacific Rim National Park, B.C.)
- Marine pollution (see Pollutants; Pollution; Pollution effects)
- Maritime Provinces (see also New Brunswick; Nova Scotia; Prince Edward Island)
- T 778 (resource development, feasibility, bay scallop)
- A 383 (pollution effects, resource development)
- CHN 66 (roe, resource development, marketing, Atlantic herring)
- Massachusetts State, USA
- J 35(5) : 510 (aromatic hydrocarbons, sediments, oil spills, Buzzards Bay)
- (5) : 648 (pollution effects, oil spills, salt-marsh crab)
- (5) : 668 (pollution effects, petroleum, enzymes, mummichog, Mass.)
- (5) : 717 (oil spills, pollution effects, benthos, Buzzards Bay)
- (5) : 731 (oil spills, pollution effects, invertebrates, salt marsh, Bourne)
- (8) : 1155 (demersal fisheries, echo surveys, acoustic equipment, Massachusetts Bay)
- Mathematical models
- J 35(1) : 53 (population structure, lake trout, lake whitefish, arctic lakes, Que.)
- (1) : 69 (temperature effects, hatching time, chinook salmon)
- (2) : 184 (statistical analysis, age-length key, bias, fishes)
- (2) : 190 (phosphorus, primary production, eutrophication, Shield lakes, Experimental Lakes Area lakes, NW Ont.)
- (2) : 197 (yield equation, fish lengths)
- (2) : 208 (fishery management, fishery research, optimal control)
- (2) : 229 (potential yield, recruitment, Atlantic mackerel, NW Atl.)
- (2) : 235 (resource management, regional development, Kemano II, Skeena R., B.C.)
- (3) : 279 (population dynamics, catch/effort, temperature effects, Atlantic cod, yellowtail flounder, Scotian Shelf, Gulf of Maine)
- (3) : 300 (phosphorus budget, chlorophyll a, Precambrian lakes, Algonquin Park, Ont.)
- (4) : 422 (carbon isotopes, Great Lakes)
- (6) : 833 (age composition, population density, Dungeness crab)
- (8) : 1067 (hydrodynamics, continental shelf, continental slope, N.S.)
- (10) : 1303 (limiting factors, marine environment, production, Pacific salmon)
- (10) : 1322 (temperature effects, development, eggs, copepods)
- (11) : 1479 (growth curves, seasonal variations)
- (12) : 1532 (phosphorus retention, freshwater lakes)
- (12) : 1631 (water circulation, St. Georges Bay, N.S.)
- T 760 (fishery management, Arctic char, Labrador)
- M 1445 (yield predictions, American lobster)
- S 2391 (colonization, benthos)
- 2441 (fishery products, freezing times, thawing times)
- Megaptera novaeangliae* (see Whale, humpback)
- Memphremagog, Lake, Que.-Vt., America
- J 35(3) : 315 (phosphorus, streams)
- (12) : 1597 (daily ration, food consumption, yellow perch)
- Mercury; Mercury compounds
- J 34(4) : 381 (histochemistry, rainbow trout)
- (6) : 880 (toxicity, cytoplasm, zooplankton, chum salmon)
- T 763 (pollution monitoring, fishes, shellfish, Howe Sound, B.C.)
- D 63 (crustaceans, fishes, Howe Sound, B.C.)
- S 2410 (herring meal, diets, poultry)
- 2411 (herring meal, diets, poultry)
- 2500 (toxicity, swordfish, NW Atl.)
- Meristic counts
- J 35(1) : 124 (multivariate analysis, capelin, Atl. coast, Canada)

- Merluccius bilinearis* (see Hake, silver)
productus (see Hake, Pacific)
- Mesidotea* (see Isopoda)
- Mesopododon bidens* (see Whale, North Sea beaked)
- Metabolism**
 J 35(6) : 816 (metabolic rates, energy flow, spiny dogfish)
 (7) : 1003 (ammonia, sockeye salmon)
 S 2387 (pollution effects, petroleum, *Onisimus (Boekisimus) affinis*)
 2508 (fatty acids, heart, rats, monkey)
 2515 (eutrophic lakes, methane cycle, Man.)
- Metals**
 J 35(4) : 479 (toxicity, synergism, algae, diatoms, Great Lakes)
- Metamorphosis**
 S 2470 (limiting factors, juveniles, coho salmon)
- Methodology**
 J 35(1) : 88 (dechlorination, system design, fish culture)
 (1) : 136 (analysis, food consumption, predators)
 (1) : 143 (tagging, radioisotopes, predation, convict cichlid)
 (2) : 247 (degradation, leaves, streams)
 (3) : 332 (diving, sampling, benthic invertebrates, Penobscot R., Me.)
 (3) : 336 (seeding, outplanting method, Irish moss)
 (8) : 1130 (aerial surveys, evaluation, Pacific walrus)
 (12) : 1597 (daily ration, food consumption, yellow perch, L. Memphremagog, Que.-Vt.)
 T 703 (fluorescence, chlorophylls, biomass, Experimental Lakes Area, NW Ont.)
 710 (monitoring, pH, flow-through system)
 M 1439 (stock assessment, swordfish)
 D 41 (sampling, data processing, zoobenthos, Beaufort Sea)
 S 2482 (predictions, survival, rainbow trout, lakes, Man., Sask.)
- Mexico, Baja California**
 J 35(7) : 981 (larvae, juveniles, blackgill rockfish)
- Michigan, Lake, America**
 J 35(2) : 249 (feeding behavior, alewife, bloater, lake herring)
 (9) : 1165 (life history, population number, seasonal variations, opossum shrimp)
- Micropterus salmoides* (see Bass, largemouth)
- Microstomus pacificus* (see Sole, Dover)
- Migrations**
 J 35(1) : 48 (activity patterns, seasonal variations, Arctic char, perennial springs, Canning R., Alaska)
 (1) : 76 (oceanodromous, smolts, Atlantic salmon, Penobscot R. estuary, Me.)
 (1) : 93 (seawater adaptation, juveniles, Atlantic salmon)
 (11) : 1488 (indicator species, *Cystidicola cristivomeri*, Arctic char, Stanwell-Fletcher L., N.W.T.)
 S 2421 (oceanodromous, ultrasonic tracking, sockeye salmon, Fraser R., B.C.)
 2422 (ultrasonic tracking, Atlantic salmon, Miramichi R. estuary, N.B.)
 T 733 (monitoring stations, portable weirs, fishes, Nfld.)
 D 77 (tagging, sablefish, NE Pac.)
- Milfoil, Eurasian (*Myriophyllum spicatum*)**
 T 786 (biological plant control, grass carp, Okanagan Basin lakes, B.C.)
- Mink (*Mustela vison*)**
 S 2439 (*Anisakis simplex* larvae, experimental infection)
- Minnow, fathead (*Pimephales promelas*)**
 J 35(4) : 446 (cadmium, pollution effects, schooling behavior)
 (7) : 997 (polychlorinated biphenyls, bioaccumulation, toxicity)
 (7) : 1009 (cell culture, bioassays, viruses)
- Miramichi River, N.B.**
 J 35(2) : 175 (habitat, juveniles, Atlantic salmon)
 T 696 (heavy metals, sediments, estuaries)
 M 1444 (sport fishing statistics, catch/effort, Atlantic salmon, brook trout, Cains R., Miramichi R. system)
 S 2422 (migrations, ultrasonic tracking, Atlantic salmon, Miramichi R. estuary)
- Mollusca**
 J 35(1) : 154 (*Anodonta cataraeta*, *A. implicata*, parasitism, *Baeocetus bicolor*, Morice L., N.B.)
- Molting**
 J 35(5) : 650 (pollution effects, chronic oiling, *Mesitodea entomon*)
- Monitoring (see also Pollution monitoring)**
 M 1451 (environmental effects, pipelines, Alaska)
 D 45 (chlorophylls, fluorometry, Experimental Lakes Area, NW Ont.)
 53 (fisheries, Great Slave L., N.W.T.)
 85 (toxicity, shellfish, N.B., N.S.)
 A 379 (marine organisms, World Oceans)
- Monitoring stations**
 T 733 (portable weirs, Atlantic salmon, Arctic char, brook trout, Nfld.)

- Monkey (*Macaca fascicularis*)
 S 2429 (diets, fatty acids, pathology)
 2507 (diets, fatty acids, pathology)
 2408 (fatty acids, metabolism, heart)
- Monodon monoceros* (see Narwhal)
- Morone americana* (see Perch, white)
- Morphology (organisms)
 J 35(1): 101 (rodlet cell, marine fishes, freshwater fishes)
 (1): 124 (multivariate analysis, capelin, Atl. coast, Canada)
 S 2418 (*Salmincola cottidarum*)
 2426 (new species, *Rhabdocona kisutchi*)
 2470 (abnormalities, endocrine glands, juveniles, coho salmon)
- Mortality: Mortality causes
 J 35(2): 197 (predictions, yield equation, fish lengths, catfish, L. Victoria, Africa)
 (9): 1191 (hydraulic engineering, blasting, freshwater fishes, L. Erie)
 (9): 1249 (population dynamics, harp seal, NW Atl.)
- Morus bassanus* (see Gannet)
- Moss, Irish (*Chondrus crispus*)
 J 35(3): 336 (seeding, outplanting method, phenology, P.E.I.)
- Mouthbrooder, mozambique (*Tilapia mossambica*)
 S 2469 (growth hormones, bioassays)
- Mummichog (*Fundulus heteroclitus*)
 J 35(5): 668 (enzymes, pollution effects, petroleum, Mass.)
 (8): 1060 (toxicity, naphthalene)
 (10): 1376 (bacterial diseases, *Pseudomonas*)
- Mussel, blue (*Mytilus edulis*)
 J 35(5): 643 (enzymes, aromatics, metabolism)
- Mustela vison* (see Mink)
- Mya arenaria* (see Clam, soft-shell)
- Myriophyllum spicatum* (see Milfoil, Eurasian)
- Mysis relicta* (see Shrimp, opossum)
- Mysticeti (baleen whales) (see Whales)
- Mytilus edulis* (see Mussel, blue)
- Myxosoma cerebralis* (see Diseases; Disease control)
- Myxosporidia
 S 2390 (new genus, new species, *Conispora renalis*, Strait of Georgia, B.C.)
- N
- Narwhal (*Monodon monoceros*)
 S 2395 (progress reports, International Commission on Whaling, arctic)
 2398 (progress reports, International Commission on Whaling, arctic)
 2404 (progress reports, International Commission on Whaling, arctic)
 2460 (new records, geographical distribution, Prince Albert Sound, Victoria I., N.W.T.)
- Navicula (see Algae)
- Nematoda
 J 35(10): 1350 (*Crassicauda grampicola*, white-sided dolphin)
 (10): 1356 (*Anisakis* sp., *Stenurus globicephalae*, white-sided dolphin)
 (11): 1488 (*Cystidicola*, feeding behavior, migrations, Arctic char, Stanwell-Fletcher L., N.W.T.)
 S 2426 (*Rhabdocona kisutchi*, new species, morphology)
 2439 (*Anisakis simplex*, experimental infection, mink)
 2475 (*Anisakis simplex*, biometrics, biological indicators, host stocks, NW Atl.)
 CHN 65 (codworm, quantitative distribution, separation, Atlantic cod)
- Nereocystis* (see Seaweeds)
- Nevada State, USA (see Tahoe, Lake)
- New Brunswick (Province), Canada (see also Fundy, Bay of; Miramichi River, Saint John River)
 J 35(1): 154 (parasitism, *Baeocetus bicolor*, freshwater molluscs, Morice L.)
 (2): 175 (habitat, juveniles, Atlantic salmon, Miramichi R., Nashwaak R.)
 T 696 (heavy metals, sediments, estuaries, Miramichi R., Nepisiguit R., Restigouche R.)
 735 (stock assessment, population structure, population dynamics, Atlantic oyster, Caraquet Bay)
 785 (spawning grounds, physical properties, Atlantic salmon, streams)
 M 1441 (sport fishing statistics, catch/effort, Atlantic salmon, brook trout, Little Main Restigouche R.)
 1462 (benthos, check lists, sublittoral zone, St. Croix R. estuary)
 1463 (benthos, check lists, sublittoral zone, Musquash R. estuary)
 1468 (acid precipitation, pH, sulfur compounds, St. Andrews)
 D 81 (stocking organisms, production, distribution, salmonids)
 85 (toxicity, monitoring, shellfish)
 S 2435 (fenitrothion, toxicity, dispersion, spruce budworm)

- New genera
S 2390 (*Conispora*, Strait of Georgia, B.C.)
- New records
J 35(9) : 1223 (*Ectocotyla hirudo*, commensalism)
(10) : 1356 (helminths, digestive tract, white-sided dolphin)
S 2440 (geographical distribution, *Planktoniella sol*, Bedford Basin, N.S.)
2460 (geographical distribution, narwhal, Prince Albert Sound, Victoria I., N.W.T.)
2462 (geographical distribution, northern wolffish, Amundsen Gulf, N.W.T.)
2463 (geographical distribution, Cetacea, Madeira)
2472 (*Peniculus asinus*, NE Pac.)
2473 (geographical distribution, harbor porpoise, Mackenzie R. delta, N.W.T.)
2492 (geographical distribution, white pelican, gannet, Victoria I., N.W.T.)
- New species
J 35(9) : 1223 (*Ectocotyla multitesticulata*, commensalism)
S 2390 (*Conispora renalis*, Strait of Georgia, B.C.)
2426 (*Rhabdochona kisutchi*)
2472 (*Peniculus asinus*, NE Pac.)
- Newfoundland (Province), Canada (see also Grand Bank; Labrador; St. Pierre Bank)
J 35(1) : 60 (growth, juveniles, Atlantic salmon, Western Arm Brook)
(12) : 1537 (life history, taxonomy, sub-population, Arctic char, Gros Morne National Park)
T 733 (monitoring stations, portable weirs, Atlantic salmon, Arctic char, brook trout)
M 1461 (by catch, fishing gear, landing statistics, Atlantic salmon)
D 84 (catch/effort, angling, Atlantic salmon)
S 2393 (whaling statistics, exploitation, sperm whale, Trinity Bay)
2399 (whaling statistics, fishery data, minke whale, Trinity Bay)
A 366 (fishery resources, availability)
- Nitrites
J 35(6) : 822 (nitrite toxicity, therapy, steelhead trout)
- Nitrogen; Nitrogen compounds
J 35(1) : 28 (nutrient enrichment, algal settlements, Carnation Creek, Vancouver I., B.C.)
(8) : 1089 (sedimentation, Char L., N.W.T.)
(8) : 1095 (seasonal variations, Bay of Quinte, L. Ontario)
(8) : 1102 (kinetics, primary production, Bay of Quinte, L. Ontario)
S 2431 (food conversion, algae, *Navicula*, *Isochrysis*)
A 354 (food conversion, algae)
- North America
S 2509 (arsenic, solubility, freshwater lakes)
- North Sea
J 35(5) : 544 (oil spills, blowout, pollution effects, Ekofisk)
- Northumberland Strait, Gulf of St. Lawrence
M 1431 (surveys, benthos, demersal fishes, sediments)
1432 (surveys, shellfish)
- Northwest Territories (Territory), Canada (see also Great Slave Lake; Mackenzie River)
J 35(7) : 945 (fecundity, exploitation, lake whitefish, lake trout)
(8) : 1089 (sedimentation, nutrients, Char L., N.W.T.)
(11) : 1488 (feeding behavior, migrations, indicator species, Arctic char, Stanwell-Fletcher L.)
M 1449 (sport fishing statistics, catch/effort, catch composition, walleye, Hay R.)
D 46 (biochemical composition, caloric value, seasonal variations, *Onisimus* (=Boeckosimus) *affinis*, Eskimo Lakes)
S 2460 (new records, geographical distribution, narwhal, Victoria I., Prince Albert Sound)
2461 (orientation behavior, juveniles, ringed seal, bearded seal, Baffin I., Victoria I.)
2462 (new records, geographical distribution, northern wolffish, Amundsen Gulf)
2492 (new records, geographical distribution, white pelican, gannet, Victoria I.)
A 357 (petroleum, biodegradation, Eskimo Lakes)
394 (transportation, arctic zone)
- Norway
J 35(5) : 615 (pollution effects, aromatic hydrocarbons, benthos)
T 779 (fish culture, aquaculture techniques, salmonids)
- Nova Scotia (Province), Canada (see also Bedford Basin; Chedabucto Bay; Fundy, Bay of; Scotian Shelf; St. Georges Bay; St. Margaret's Bay)
T 687 (quality control, depuration, soft-shell clam, Digby)
D 47 (surveys, lakes)
64 (surveys, water quality, Sherbrooke L.)
81 (stocking organisms, production, distribution, salmonids)
85 (toxicity, monitoring, shellfish)
S 2393 (whaling statistics, exploitation, sperm whale, Blandford)
2396 (whaling statistics, exploitation, sei whale, Blandford)
2464 (pollution detection, bacteria, soft-shell clam)

Nutrient cycles

S 2506 (sea ice, arctic zone)

Nutrients (mineral)

J 35(1) : 28 (enrichment, algal settlements, Carnation Creek, Vancouver I., B.C.)

(3) : 305 (Juan de Fuca Strait)

T 688 (4) : 414 (water mixing, Scotian Shelf)
762 (food conversion, Atlantic salmon)
(experimental data, Bedford Basin, N.S.)

D 62 (experimental data, continental shelf, N.S.)

82 (experimental data, Baffin Bay, inlets)

83 (experimental data, Labrador Sea)

Nutrition; Nutritional requirements (see Diets)

O

Ocean dumping

T 713 (pollution monitoring, underwater photography, biological surveys, Strait of Georgia, B.C.)

Oceanographic data

D 65 (sea level variations, graphs, Alert Bay, Tofino, Point Atkinson, Prince Rupert, B.C.)

67 (bathythermograph, water temperature, Queen Charlotte Sound, Vancouver I., B.C.)

68 (water circulation, wind-driven currents, computer programs, N Pac.)

Octopus (*Octopus dofleini*)

J 35(11) : 1492 (population structure, recruitment, fishery development, Clayoquot Sound, B.C.)

Odobenus rosmarus (see Walrus)*rosmarus divergens* (see Walrus, Pacific)

Odontoceti (toothed whales) (see Whales)

Oil pollution (see also Oil spills; also Pollutants; Pollution; Pollution effects)

J 35(5) : 499-795 (symposium, marine northern environment)

(5) : 510 (aromatic hydrocarbons, sediments, Buzzards Bay, Mass.)

(5) : 521 (oil spills, biodegradation, weathering, Broughton Strait, B.C.)

(5) : 528 (oil spills, sediments, Chedabucto Bay, N.S.)

(5) : 536 (petroleum, chronic inputs, sediments, Narragansett Bay, Rhode I. Sound, R.I.)

(5) : 544 (oil spills, blowout, pollution effects, Ekofisk, North Sea)

(5) : 552 (petroleum hydrocarbons, weathering, sediments, Searsport, Me.)

(5) : 563 (dispersal, weathering, littoral zone)

(5) : 573 (oil spills, biodegradation, Straits of Magellan, SW Atl.)

(5) : 581 (oil spills, sediments, bacteria,

Chedabucto Bay, N.S.)

(5) : 585 (petroleum, biodegradation, weathering, arctic ecosystems)

(5) : 591 (petroleum, sediments, weathering, *Arenicola marina*)

(5) : 608 (aromatic hydrocarbons, sediments, bioaccumulation, bivalves, sipunculid)

(5) : 615 (pollution effects, aromatic hydrocarbons, benthos, Norway)

(5) : 624 (pollution effects, ecological genetics, oyster drill)

(5) : 630 (chronic oiling, growth, physiology, soft-shell clam)

(5) : 637 (petroleum hydrocarbons, pollution effects, respiration, soft-shell clam)

(5) : 643 (aromatics, enzymes, metabolism, bivalves)

(5) : 648 (pollution effects, oil spills, salt-marsh crab, West Falmouth, Mass.)

(5) : 650 (chronic oiling, growth, molting, *Mesidotea entomon*)

(5) : 657 (aromatic hydrocarbons, bioavailability, English sole)

(5) : 665 (chronic oiling, petroleum, pathology, cunner)

(5) : 668 (petroleum, pollution effects, enzymes, mummichog, Mass.)

(5) : 675 (oil removal, conservation, guillemot, razorbill)

(5) : 707 (pollution effects, intertidal communities, Chedabucto Bay, N.S.)

(5) : 766 (chronic pollution, pollution effects, recolonization, benthos, Finland)

(5) : 776 (sediment hydrocarbons, recruitment, benthos, Sequim Bay, Wash.)

(12) : 1547 (pollution monitoring, indicator species, cunner)

Oil removal

J 35(5) : 675 (guillemot, razorbill, England)

Oil spills (see also Oil pollution)

J 35(5) : 510 (aromatic hydrocarbons, sediments, Buzzards Bay, Mass.)

(5) : 521 (petroleum, biodegradation, weathering, Broughton Strait, B.C.)

(5) : 528 (Arrow, aromatic hydrocarbons, sediments, Chedabucto Bay, N.S.)

(5) : 544 (blowout, pollution effects, Ekofisk, North Sea)

(5) : 552 (petroleum hydrocarbons, weathering, sediments, Searsport, Me.)

(5) : 573 (*Metula*, biodegradation, bacteria, Straits of Magellan, SW Atl.)

(5) : 581 (bacteria, hydrocarbons, sediments, Chedabucto Bay, N.S.)

(5) : 615 (pollution effects, benthos, Norway)

(5) : 648 (pollution effects, salt-marsh crab, West Falmouth, Mass.)

(5) : 675 (Torrey Canyon, oil removal, guillemot, razorbill, England)

(5) : 682 (Torrey Canyon, recolonization, Cornwall, Eng.)

- (5) : 717 (Florida, pollution effects, benthos, Buzzards Bay, Mass.)
 (5) : 731 (Bouchard 65, pollution effects, invertebrates, salt marsh, Bourne, Mass.)
 (5) : 745 (Iirini, pollution effects, *Fucus* macrofauna, Gästviken, Sweden)
 (5) : 754 (General M. C. Meigs, pollution effects, intertidal communities, Wreck Cove, Wash.)
 S 2430 (dispersants, effectiveness, toxicity)
 2495 (dispersants, pollution effects, cunner)
 A 393 (pollution effects, aquatic mammals)
- Olfaction
 S 2497 (chemical stimuli, amino acids, aquatic environment)
- Oncorhynchus gorbuscha* (see Salmon, pink)
keta (see Salmon, chum)
kisutch (see Salmon, coho)
nerka (see Salmon, sockeye)
 spp. (see Salmon (Pacific in general))
tshawytscha (see Salmon, chinook)
- Onisimus* (see Amphipoda)
- Ontario (Province), Canada (see also Experimental Lakes Area)
 J 35(1) : 131 (habitat, reproductive behavior, sympatric populations, pumpkinseed, longear sunfish, Thames R.)
 (3) : 300 (phosphorus budget, chlorophyll *a*, Algonquin Park)
 (4) : 391 (fish culture, survival, brook trout, lakes)
 (6) : 809 (atmospheric precipitations, acidity, lakes, south-central Ont.)
 (6) : 866 (temperature effects, seasonal variations, aquatic plants, rivers)
 (6) : 916 (fishery management, perspectives)
 S 2391 (benthos, colonization, man-made stream, Moser Creek)
- Ontario, Lake, America
 J 35(8) : 1095 (nitrogen, seasonal variations, Bay of Quinte)
 (8) : 1102 (nitrogen, kinetics, primary production, Bay of Quinte)
 (11) : 1401 (chemical pollutants, indicator species, coho salmon, herring gull)
- Ophiodon elongatus* (see Lingcod)
- Orcinus orca* (see Whale, killer)
- Oregon State, USA
 J 35(8) : 1141 (lesions, exoskeleton, tanner crab)
- Organic acids
 T 730 (resin acids, pulp mill effluents, analytical techniques)
- S 2437 (separation, fatty acids, resin acids)
- Organic constituents
 T 787 (seasonal variations, brown alga, B.C.)
- Organic suspended matter
 A 354 (food conversion, algae)
- Organoleptic properties
 S 2449 (storage effects, chilling storage, witch flounder)
- Orientation behavior
 J 35(6) : 910 (salinity, recording equipment, gulf killifish)
 (11) : 1430 (temperature effects, phototaxis, fingerlings, rainbow trout)
 S 2461 (juveniles, ringed seal, bearded seal, Baffin I., Victoria I., N.W.T.)
- Oschmarinella* (see Trematoda)
- Osmerus mordax* (see Smelt, rainbow)
- Osmoregulation
 J 35(1) : 93 (seawater adaptation, parr-smolt transformation, juveniles, Atlantic salmon)
 T 761 (smolts, chinook salmon, coho salmon)
 D 76 (physiology, *Mesidotea*, S Beaufort Sea)
 S 2469 (growth hormones, sockeye salmon)
- Osmosis
 J 35(6) : 871 (immunology, antigens, limiting factors, rainbow trout)
- Ostrea edulis* (see Oyster, European flat)
- Otoliths; Otolith reading
 S 2420 (growth, Atlantic herring, Bay of Fundy)
- Ovulation
 J 35(11) : 1423 (hormones, coho salmon)
- Oxidation
 S 2427 (enzymes, *Pseudomonas aeruginosa*)
 2477 (antioxidants, fats, Atlantic mackerel)
 2512 (methane cycle, eutrophic lakes, Man.)
 2514 (fats, Atlantic mackerel)
- Oxygen consumption
 J 35(12) : 1621 (sediments, seasonal variations, Bedford Basin, N.S.)
 S 2455 (locomotion, rainbow trout)
- Oyster, Atlantic (*Crassostrea virginica*) (American oyster)
 T 735 (stock assessment, population structure, population dynamics, Caraquet Bay, N.B.)
 I 97 (storage, quality control)

- Oyster drill (*Urosalpinx cinerea*)
 J 35(5) : 624 (ecological genetics, oil pollution, pollution effects)
- Oyster, European flat (*Ostrea edulis*)
 J 35(5) : 643 (enzymes, aromatics, metabolism)
- Oyster, Pacific (*Crassostrea gigas*)
 T 781 (oyster culture, breeding, seed collection, Pendrell Sound, Lady-smith Harbour, Hotham Sound, B.C.)
 M 1454 (breeding, seed collection, Lady-smith Harbour, Hotham Sound, B.C.)
 S 2434 (boron, toxicity tests)
- Oysters (see also names of species)
 J 35(4) : 409 (cadmium, polarographic studies)
- Ozone
 J 35(6) : 875 (disease control, viruses, salmonids)
 (10): 1290 (water purification, disease control, recirculating systems)
- P
- Pacific Ocean
 J 35(10): 1381 (distribution, *Exosphaeroma inornata*, NE Pac.)
 T 736 (catch/effort, groundfish, Pac. coast)
 773 (check lists, biological collections, asteroids, NE Pac.)
 784 (population dynamics, fishery management, Pacific herring, NE Pac.)
 D 49 (zooplankton, seasonal variations, annual variations, Ocean Station P)
 68 (water circulation, wind-driven currents, computer programs, NE Pac.)
 77 (tagging, migrations, aging methods, sablefish, NE Pac.)
 95 (surface water, salinity, graphs, NE Pac.)
 I 99 (exploratory fishing, stock assessment, Dover sole, NE Pac.)
 S 2395 (progress reports, International Commission on Whaling, killer whale, N Pac.)
 2398 (progress reports, International Commission on Whaling, killer whale, N Pac.)
 2404 (progress reports, International Commission on Whaling, killer whale, N Pac.)
 2472 (new records, new species, *Peniculus asinus*, NE Pac.)
 2505 (energy budget, adults, barnacle, NE Pac.)
- Parasites; Parasitism
 J 35(1) : 154 (*Baeoctenus bicolor*, freshwater molluscs, *Anodonta catarracta*, *A. implicata*, Morice L., N.B.)
 (10): 1356 (helminths, new records, digestive tract, white-sided dolphin)
 (11): 1488 (swimbladder, *Cystidicola cristivomeri*, Arctic char, Stanwell-Fletcher L., N.W.T.)
- S 2390 (*Conispora renalis*, Pacific hake, Strait of Georgia, B.C.)
 2418 (*Salmincola cottidarum*)
 2426 (*Rhabdochona kisutchi*, new species, coho salmon)
 2472 (*Peniculus asinus*, *Sebastes*, new records, NE Pac.)
 2439 (*Anisakis simplex*, experimental infection, mink)
 CHN 65 (codworm, quantitative distribution, separation, Atlantic cod)
- Parophrys vetulus* (see Sole, English)
- Pathogens
 J 35(12): 1629 (identification, bacteria, culture media, fishes)
- Pathology
 J 35(5) : 657 (pollution effects, aromatic hydrocarbons, English sole)
 (5) : 665 (chronic oiling, petroleum, cunner)
 (9) : 1234 (kidney, brook trout)
 (10): 1376 (*Pseudomonas reptilivora*, bacterial diseases, mummichog)
 S 2429 (diets, fatty acids, monkey)
 2507 (docosenoic acids, heart, monkey)
- PCBs (see Polychlorinated biphenyls)
- Pelecanus erythrorhynchos* (see Pelican, white)
- Pelican, white (*Pelecanus erythrorhynchos*)
 S 2492 (new records, geographical distribution, Victoria I., N.W.T.)
- PEN (Piscine erythrocytic necrosis) (see Viruses)
- Peniculus asinus* (Copepoda)
 S 2472 (new species, new records, NE Pac.)
- Perca flavescens* (see Perch, yellow)
- Perch, Pacific ocean (*Sebastes alutus*)
 J 35(2) : 184 (age-length key, bias)
 D 42 (biomass, stock assessment, catch/effort, Queen Charlotte Sound, B.C.)
 I 94 (stock assessment, production, Hecate Strait, Queen Charlotte Sound, B.C.)
- Perch, white (*Morone americana*)
 J 35(11): 1464 (temperature preference, environmental factors)
- Perch, yellow (*Perca flavescens*)
 J 35(12): 1597 (daily ration, food consumption, L. Memphremagog, Que.-Vt.)
- Permeability
 D 76 (water permeability, isopods, *Mesidotea*, S Beaufort Sea)
- Perspectives
 J 35(3) : 351 (research programs, limnology, long-term changes, Canada)
 (6) : 916 (fishery management, reports, Ont.)

- (7) : 1017 (fishery management, economics, fishery regulations, Canada)
- (7) : 1031 (fishery management, socio-logical aspects, Atl. Ocean, Canada)
- Pesticides**
- S 2435 (fenitrothion, dispersion, toxicity, spruce budworm, N.B.)
- 2483 (toxicity, rainbow trout)
- Petroleum** (see also Pollutants; Pollution; Pollution effects)
- J 35(5) : 536 (chronic inputs, sediments, Narragansett Bay, Rhode I. Sound, R.I.)
- (5) : 563 (dispersal, weathering, littoral zone)
- (5) : 573 (biodegradation, bacteria, Straits of Magellan, SW Atl.)
- (12) : 1547 (pollution effects, enzymes, induced AHH activity, cunner) (pollution effects, metabolism, *Onisimus*)
- S 2387 (bacterial biodegradation, environmental factors)
- 2425 (pollution monitoring, enzymes, fishes)
- 2448 (pollution effects, enzymes, brown trout, capelin)
- 2450 (biodegradation, Eskimo Lakes, N.W.T.)
- A 357 (pollution effects, invertebrates, arctic)
- 358
- Petromyzon marinus* (see Lamprey, sea)
- pH**
- J 35(4) : 437 (aquatic environment, lead, blood, rainbow trout)
- T 710 (monitoring, recording equipment, flow-through system)
- M 1468 (acid precipitation, St. Andrews, N.B.)
- Phalaris arundinacea* (see Canarygrass, reed)
- Phascolosoma* (see Sipunculoidea)
- Phenology**
- J 35(3) : 336 (Irish moss, P.E.I.)
- Phenotypes**
- J 35(10) : 1381 (taxonomy, *Exosphaeroma media*)
- Pheromones**
- S 2417 (culture tanks, behavior, American lobster)
- Phialidium gregarium* (see Leptomedusa)
- Phoca groenlandica* (see Seal, harp)
- hispida* (see Seal, ringed) (*Pusa hispida*)
- Phocanema decipiens* (codworm) (see Nematoda)
- Phocoena phocoena* (see Porpoise, harbor)
- Pholeter* (see Trematoda)
- Phosphorus; Phosphorus compounds**
- J 35(1) : 28 (nutrient enrichment, algal settlements, Carnation Creek, Vancouver I., B.C.)
- (2) : 190 (primary production, eutrophication, Shield lakes, Experimental Lakes Area lakes, NW Ont.)
- (3) : 300 (mathematical models, Precambrian lakes, Algonquin Park, Ont.)
- (3) : 315 (kinetics, streams, L. Memphremagog, Que.-Vt.)
- (8) : 1089 (sedimentation, Char L., N.W.T.)
- (12) : 1532 (mathematical models, freshwater lakes)
- (12) : 1636 (chemical degradation, analytical techniques)
- (12) : 1639 (biological availability)
- A 352 (limiting factors, phytoplankton, lakes, Ont.)
- 354 (food conversion, algae)
- Photosynthesis**
- D 74 (phytoplankton, Experimental Lakes Area, NW Ont.)
- S 2433 (phytoplankton, water transparency, Alberni Inlet, B.C.)
- 2436 (temporal variations, phytoplankton, Bedford Basin, N.S.)
- 2443 (circadian rhythms, phytoplankton, Bedford Basin, N.S.)
- Photosynthetic pigments**
- S 2465 (cytology, Cyanophyta)
- Phototaxis**
- J 35(11) : 1430 (temperature effects, orientation behavior, fingerlings, rainbow trout)
- Phyllophora* (see Seaweeds)
- Phylogeny**
- S 2402 (Cetacea)
- Physeter catodon* (see Whale, sperm)
- Physicochemical properties**
- T 782 (intertidal environment, Bay of Fundy)
- Physiology**
- J 35(5) : 630 (chronic oiling, soft-shell clam, Chedabucto Bay, N.S.)
- (8) : 1060 (toxicity, naphthalene, mummi-chog)
- (9) : 1265 (lag adjustment, aquatic organisms)
- (12) : 1542 (smolts, Atlantic salmon)
- Phytobenthos**
- T 758 (bioassays, Thompson R., B.C.)
- Phytoplankton** (see also Primary production)
- J 35(2) : 257 (population dynamics, zooplankton grazing, Saanich Inlet, Vancouver I., B.C.)
- (9) : 1171 (biomass, community composition, temporal distribution, St. Lawrence

- R. estuary)
 (11): 1482 (heavy metals, chemical reactions, Heney L., Que.)
 (11): 1500 (growth, pollution effects, fluoride)
 T 742 (biomass, geographical distribution, ecological associations, Scotian Shelf)
 749 (ATP indicator, impoundment, Southern Indian L., Man.)
 M 1466 (ecological succession, seasonal variations, Experimental Lakes Area, NW Ont.)
 D 55 (biomass, seasonal variations, Bedford Basin, N.S.)
 S 2433 (photosynthesis, water transparency, Alberni Inlet, B.C.)
 2436 (photosynthesis, temporal variations, Bedford Basin, N.S.)
 2440 (new records, *Planktoniella sol*, Bedford Basin, N.S.)
 2443 (photosynthesis, circadian rhythms, Bedford Basin, N.S.)
 2452 (heterogeneity, ecological succession, Babine L., B.C.)
 2493 (abundance, marine environment)
 2494 (variations, biomass, saline eutrophic lakes, Erickson, Man.)
 2501 (petroleum, dispersants, pollution effects, arctic zone)
 A 352 (limiting factors, phosphorus, lakes, Ont.)
- Pike, northern (*Esox lucius*)
 J 35(2) : 213 (lipids, proteins, gonad growth, Lac Ste. Anne, Alta.)
- Pimpehales *promelas* (see Minnow, fathead)
- Pinnipedia (see Seals)
- Pipelines
 M 1451 (environmental effects, monitoring, Alaska)
- Placopecten magellanicus* (see Scallop, sea)
- Plankton feeders
 J 35(10): 1370 (feeding behavior, experimental research)
- Planktoniella sol* (Bacillariophyceae)
 S 2440 (geographical distribution, new records, Bedford Basin, N.S.)
- Planktonology
 S 2467 (tanks, research equipment)
- Plant control
 J 35(6) : 866 (*Cladophora*, *Potamogeton*, rivers, Ont.)
 T 786 (biological control, grass carp, Eurasian milfoil, Okanagan Basin lakes, B.C.)
 S 2499 (copper compounds, blue-green alga, Erickson-Elphinstone area, Man.)
- Plecoptera (stoneflies)
 S 2481 (distribution, *Allocapnia*, *Taeniopteryx*, S Man.)
- Pleuronectiformes (see Flatfishes)
- Poisons (biological)
 J 35(4) : 397 (toxicity tests, saxitoxin, shellfish, *Gonyaulax*)
 D 85 (paralytic shellfish poisoning, monitoring, N.B., N.S.)
 S 2511 (prunasin, Saskatoon serviceberry, B.C.)
- Pollock, walleye (*Theragra chalcogramma*) (Alaska pollock)
 T 753 (freezing storage, storage effects)
 D 48 (fishery surveys, Strait of Georgia, B.C.)
 50 (fishery surveys, stock assessment, Strait of Georgia, B.C.)
 71 (fishery surveys, Strait of Georgia, B.C.)
 88 (catch statistics, midwater trawls, Vancouver I., B.C.)
- Pollutants Pollution; Pollution effects
 J 35(1) : 141 (water analysis, copper, lakes, Man.)
 (2) : 166 (cyanides, embryos, fry, Atlantic salmon)
 (3) : 286 (cadmium, arsenic, *Asterionella formosa*)
 (4) : 446 (cadmium, predation, fathead minnow, largemouth bass)
 (4) : 461 (cadmium, population dynamics, *Daphnia*)
 (5) : 585 (petroleum, biodegradation, weathering, arctic ecosystems)
 (5) : 591 (petroleum, sediments, weathering, *Arenicola marina*)
 (5) : 608 (aromatic hydrocarbons, bivalves, sipunculid)
 (5) : 615 (aromatic hydrocarbons, benthos, Norway)
 (5) : 624 (oil pollution, ecological genetics, oyster drill)
 (5) : 630 (chronic oiling, growth, physiology, soft-shell clam)
 (5) : 637 (petroleum hydrocarbons, respiration, soft-shell clam)
 (5) : 648 (oil spills, salt-marsh crab, West Falmouth, Mass.)
 (5) : 650 (chronic oiling, growth, molting, *Mesidotea entomon*)
 (5) : 657 (bioavailability, aromatic hydrocarbons, English sole)
 (5) : 665 (petroleum, chronic oiling, pathology, cunner)
 (5) : 682 (oil spills, recolonization, aquatic communities, Cornwall, Eng.)
 (5) : 707 (petroleum, intertidal communities, Chedabucto Bay, N.S.)
 (5) : 717 (oil spills, benthos, Buzzards Bay, Mass.)
 (5) : 731 (oil spills, invertebrates, salt marsh, Bourne, Mass.)

- (5) : 745 (oil spills, *Fucus* macrofauna, Gästviken, Sweden)
- (5) : 754 (oil spills, intertidal communities, Wreck Cove, Wash.)
- (5) : 766 (oil pollution, recolonization, benthos, Finland)
- (7) : 963 (heavy metals, biological fatigue, white sucker, Hamell L., Sask.)
- (10) : 1285 (chemical pollutants, endocrine glands, coho salmon)
- (11) : 1401 (chemical pollutants, indicator species, coho salmon, herring gull, L. Ontario)
- (11) : 1500 (fluoride, growth, phytoplankton)
- T 696 (heavy metals, sediments, estuaries, NE N.B.)
- 709 (sewage effluents, fishes, invertebrates)
- 712 (chlorine, domestic wastes, Red R., Man.)
- 734 (cadmium, aquatic environment, literature reviews)
- 745 (agricultural runoff, forest industry, brook trout, slimy sculpin, benthos, Saint John R., N.B.)
- 758 (pulpmill effluents, sewage effluents, algae, Thompson R., B.C.)
- 775 (copper, interstitial environment, sediments, Howe Sound, B.C.)
- M 1447 (pulpmill effluents, water quality, bioassays, Pacific salmon, Neroutsos Inlet, B.C.)
- D 63 (mercury, marine crustaceans, marine fishes, Howe Sound, B.C.)
- 92 (waste disposal, invertebrates, fishes, Howe Sound, B.C.)
- S 2387 (petroleum, metabolism, *Onisimus* (*Boekisimus*) *affinis*)
- 2424 (chemoreception, aquatic animals)
- 2425 (petroleum, bacterial biodegradation, environmental factors)
- 2430 (oil spills, dispersants, toxicity)
- 2434 (water pollution, boron, toxicity tests, Pacific salmon, Pacific oyster)
- 2437 (pulpmill effluents, fatty acids, resin acids)
- 2442 (bioaccumulation, excretion, Atlantic salmon)
- 2453 (copper, Rupert Inlet, Holberg Inlet, Vancouver I., B.C.)
- 2458 (pulpmill effluents, avoidance, Atlantic salmon)
- 2480 (nonachlor, chlordane, toxicity, aquatic animals, East coast, Canada)
- 2495 (dispersants, surfactants, cunner)
- 2496 (terpenoids, ozone, aquatic organisms)
- 2501 (petroleum, dispersants, phytoplankton, seaweeds, arctic zone)
- A 355 (petroleum)
- 383 (resource development, Maritime Provinces)
- 385 (organic wastes, aquatic environment)
- 388 (conferences, seawater pollution, sewage effluents)
- 393 (oil spills, ringed seal, harp seal, Beaufort Sea)
- Pollution control
- A 380 (marine pollution, literature reviews, World Oceans)
- 382 (sea law, World Oceans)
- Pollution monitoring
- J 35(12) : 1547 (petroleum, enzymes, indicator species, cunner)
- T 713 (ocean dumping, underwater photography, biological surveys, Strait of Georgia, B.C.)
- 763 (mercury, fishes, shellfish, Howe Sound, B.C.)
- S 2448 (petroleum, enzymes, fishes)
- 2450 (hydrocarbons, brown trout, capelin)
- Polychaeta
- J 35(5) : 591 (weathering, petroleum, sediments, *Arenicola marina*)
- Polychlorinated biphenyls
- J 35(7) : 997 (toxicity, bioaccumulation, fathead minnow)
- (8) : 1084 (toxicity, sublethal effects, brook trout)
- Polymorphism
- S 2474 (enzymes, Atlantic salmon, Ireland)
- Population characteristics
- S 2401 (baleen whales, toothed whales, NW Atl.)
- 2489 (walrus, Canada, Greenland)
- 2490 (seals, Northern Hemisphere)
- A 369F (whales, World Oceans)
- Population control
- S 2435 (fenitrothion, toxicity, spruce budworm, N.B.)
- Population density
- J 35(6) : 833 (mathematical models, age composition, Dungeness crab)
- (6) : 885 (environmental effects, echo surveys, fishes, Great Lakes)
- (8) : 1150 (echo surveys, humpback whale, Caribbean Sea)
- M 1434 (allopatric populations, sympatric populations, cutthroat trout, Vancouver I., B.C.)
- 1435 (abalone, Moresby I., B.C.)
- Population dynamics
- J 35(3) : 279 (temperature effects, mathematical models, Atlantic cod, yellowtail flounder, Scotian Shelf, Gulf of Maine, NW Atl.)
- (4) : 461 (pollution effects, cadmium, *Daphnia*)
- (6) : 797 (mathematical models, predation, juveniles, Pacific salmon, B.C.)
- (6) : 833 (mathematical models, age composition, population density, Dungeness crab)

- (7) : 945 (fecundity, lake whitefish, lake trout, N.W.T.)
 (9) : 1249 (harp seal, NW Atl.)
 (11) : 1434 (survival, marine environment, Pacific salmon)
- T 735 (Atlantic oyster, Caraquet Bay, N.B.)
 784 (Pacific herring, NE Pac.)
 M 1439 (statistical analysis, swordfish)
 1446 (exploitation, red sea urchin, Tofino, B.C.)
 A 361 (fishery management, historical review)
- Population factors
 D 71 (benthic environment, Pacific hake, walleye pollock, spiny dogfish, Strait of Georgia, B.C.)
- Population genetics
 J 35(1) : 117 (stock identification, electrophoresis, proteins, Atlantic cod, Laurentian Channel, Flemish Cap, NW Atl.)
 (1) : 145 (sexual maturity, Atlantic salmon)
- Population number
 J 35(9) : 1165 (seasonal variations, *Mysis relicta*, L. Michigan)
 T 788 (Pacific salmon, Strait of Georgia, B.C.)
 S 2484 (seasonal variations, ducks, Fraser R. delta, B.C.)
- Population structure
 J 35(1) : 53 (mathematical models, lake trout, lake whitefish, arctic lakes, Que.)
 (11) : 1492 (octopus, Clayoquot Sound, B.C.)
 T 735 (Atlantic oyster, Caraquet Bay, N.B.)
 M 1435 (size distribution, abalone, Moresby I., B.C.)
 1455 (commercial species, abalone, Moresby I., B.C.)
- Porpoise, bottlenose (*Tursiops truncatus*)
 S 2463 (geographical distribution, Madeira)
- Porpoise, harbor (*Phocoena phocoena*)
 S 2473 (new records, geographical distribution, Mackenzie R. delta, NW Atl.)
- Porpoises (Cetacea) (see also names of species)
 S 2405 (proposed research, International Commission on Whaling)
 A 370 (catch statistics, fishery management, proposed research, World Oceans)
 371 (conservation, World Oceans)
- Potamogeton (see Aquatic plants)
- Potential yield
 J 35(2) : 229 (mathematical models, Atlantic mackerel, NW Atl.)
 (9) : 1249 (population dynamics, harp seal, NW Atl.)
- Poultry
 S 2410 (mercury, herring meal)
 2411 (tissues, mercury, herring meal)
- Precipitations (atmospheric)
 J 35(6) : 809 (acidity, buffers, lakes, south-central Ont.)
 M 1468 (pH, sulfur compounds, St. Andrews, N.B.)
- Predation; Predators
 J 35(1) : 136 (analysis, food consumption)
 (1) : 143 (tagging radioisotopes, convict cichlid)
 (2) : 249 (alewife, bloater, lake herring, L. Michigan)
 (2) : 257 (medusa, zooplankton, Saanich Inlet, Vancouver I., B.C.)
 (4) : 446 (pollution effects, cadmium, fathead minnow, largemouth bass)
 (6) : 797 (population dynamics, mathematical models, juveniles, Pacific salmon, B.C.)
 (6) : 844 (harbor seals, lake trout, brook trout, Lower Seal L., Que.)
 (10) : 1370 (plankton feeders, experimental research)
 (11) : 1457 (rainbow smelt, lake herring larvae, L. Superior)
 (11) : 1495 (zooplankton, lake trout) (ringed seal, northern wolffish, Amundsen Gulf., N.W.T.)
 S 2462
- Preservation (fishery products)
 T 731 (brines, minced products)
 783 (chilling storage, seawater, quality control)
- Primary production (see also Phytoplankton)
 J 35(2) : 190 (phosphorus eutrophication, Shield lakes, Experimental Lakes Area lakes, NW Ont.)
 (8) : 1102 (nitrogen, kinetics, Bay of Quinte, L. Ontario)
 T 741 (annual variations, computer programs)
 762 (experimental data, Bedford Basin, N.S.)
 D 62 (phytoplankton, experimental data, continental shelf, N.S.)
 74 (phytoplankton, Experimental Lakes Area, NW Ont.)
 82 (phytoplankton, experimental data, Baffin Bay, inlets)
 83 (phytoplankton, experimental data, Labrador Sea)
 S 2456 (phytoplankton, upwelling, Bedford Basin, N.S.)
- Prince Edward Island (Province), Canada
 J 35(3) : 336 (outplanting method, Irish moss)
 D 81 (stocking organisms, production, distribution, salmonids)
- Processing fishery products
 T 687 (depuration, soft-shell clam, Digby, N.S.)

- 731 (preservation, brines, minced products)
 739 (quality control, Pacific herring roe)
 D 51 (freezing storage, sablefish)
 I 97 (storage, quality control, American oyster)
 105 (financing, B.C.)
 S 2441 (mathematical models, freezing times, thawing times)
 2477 (antioxidants, fats, Atlantic mackerel)
 2514 (irradiation, Atlantic mackerel)
 A 391 (rainbow trout, Man.)
 CHN 64 (thawing, fillet blocks, Atlantic herring)
 65 (separation, codworm, Atlantic cod)
 66 (roe, Atlantic herring, Maritime Provinces)
- Prochlorophyta (algae)
 S 2465 (taxonomy)
- Production (biological) (see also Primary production)
 J 35(9) : 1249 (population dynamics, harp seal, NW Atl.)
 (10) : 1303 (limiting factors, mathematical models, marine environment, Pacific salmon)
 T 741 (primary production, annual variations, computer programs)
 766 (incubation, aquaculture techniques, pink salmon)
 I 94 (groundfish, Hecate Strait, Queen Charlotte Sound, B.C.)
- Prosopium cylindraceum* (see Whitefish, round)
- Proteins
 J 35(1) : 117 (electrophoresis, stock identification, Atlantic cod, Laurentian Channel, Flemish Cap, NW Atl.)
 (2) : 213 (gonad growth, northern pike, Lac Ste. Anne, Alta.)
 (7) : 951 (rapeseed proteins, diets, rainbow trout)
 T 688 (food conversion, Atlantic salmon)
 S 2408 (minced products, freezing storage, flatfishes, red hake)
 2454 (metallothioneins, liver, grey seal, fur seal, copper rockfish)
- Protothaca* (see Bivalvia)
- Pseudomonas* (see Bacteria; see also Diseases; Disease control)
- Pulpmill effluents (see Industrial wastes; see also Pollutants; Pollution; Pollution effects)
- Pumpkinseed (*Lepomis gibbosus*)
 J 35(1) : 12 (intraspecific competition, food, feeding behavior)
 (1) : 131 (reproductive behavior, habitat, Thames R., Ont.)

Q

- Quality control
 J 35(4) : 473 (chilling storage, Pacific herring, NE Pac.)
 I 97 (storage, American oyster)
 A 364 (fishery products)
- Quebec (Province), Canada (see also Lake Memphremagog)
 J 35(1) : 53 (population structure, lake trout, lake whitefish, arctic lakes)
 (6) : 844 (predation, harbor seal, lake trout, brook trout, Lower Seal L.)
 (11) : 1482 (heavy metals, chemical reactions, phytoplankton, Heney L.)
- Queen Charlotte Islands; Queen Charlotte Sound; Queen Charlotte Strait, B.C.
 T 768 (trawl nets, fishing power, statistical analysis, rockfishes, Queen Charlotte Sound)
 789 (fishery surveys, abalone, seaweeds, Queen Charlotte Strait)
 M 1473 (watersheds, hydrology, forest industry, Queen Charlotte Is.)
 D 42 (biomass, stock assessment, catch/effort, Pacific ocean perch, Queen Charlotte Sound)
 51 (exploratory fishing, groundfish, fishing grounds, Queen Charlotte Sound)
 52 (catalogues, streams, escapement, Pacific salmon, Queen Charlotte Is.)
 67 (oceanographic data, bathythermographs, water temperature, Queen Charlotte Sound)
 72 (catalogues, streams, escapement, Pacific salmon, Queen Charlotte Is.)
 I 94 (stock assessment, production, groundfish, Hecate Strait, Queen Charlotte Sound)

R

- Rapeseed (*Brassica* spp.)
 S 2428 (oil, physicochemical properties)
 2429 (fatty acids, diets, monkey)
 2487 (oils, specific gravity)
- Rat (Rodentia)
 S 2508 (fatty acids, metabolism, heart)
- Razorbill (*Alca torda*)
 J 35(5) : 675 (oil removal, conservation)
- Rearing
 J 35(9) : 1269 (smolts, Atlantic salmon)
 M 1452 (juveniles, steelhead trout, Fulton R., B.C.)
 1453 (smolts, chinook salmon, Fulton R., B.C.)
 2468 (larvae, American lobster)
- Records, new (see New records)

- Recruitment
 J 35(2) : 229 (mathematical models, potential yield, Atlantic mackerel, NW Atl.)
 (11): 1492 (octopus, Clayoquot Sound, B.C.)
- Red River, Man.
 T 712 (chlorine, domestic wastes, toxicity)
- Redfish (*Sebastes marinus*/*S. mentella*) (ocean perch)
 A 367 (fishery resources, quota regulations, Gulf of St. Lawrence)
- Reproduction (biology)
 J 35(10): 1350 (limiting factors, parasitic mastitis, white-sided dolphin)
 (11): 1423 (hormones, oocyte maturation, ovulation, coho salmon)
 T 732(1): (bibliographies, Abramis to Clinostomus)
 732(2): (bibliographies, Clupea to Ompok)
 732(3): (bibliographies, Oncorhynchus to Zygonectes)
 M 1471 (sexual reproduction, captivity, fur seal)
- Reproductive behavior
 J 35(1) : 131 (sympatric populations, pumpkinseed, longear sunfish, Thames R., Ont.)
 (10): 1385 (rock crab)
 (11): 1469 (regional variations, American shad, NW Atl.)
 S 2388 (allopatric populations, sperm whale)
 2515 (bioassays, *Anisogammarus pugettensis*)
- Reproductive organs
 J 35(2) : 213 (lipids, proteins, gonad growth, northern pike, Lac Ste. Anne, Alta.)
- Reservoirs (water)
 T 749 (ATP indicator, plankton biomass, Southern Indian L., Man.)
- Resin acids
 S 2437 (separation, methodology, toxicity tests)
- Resource conservation
 S 2403 (northern bottlenose whale, N Atl.)
 A 395 (endangered species, whales, Canada)
- Resource development
 J 35(11): 1492 (coastal fisheries, octopus, B.C.)
 T 778 (shellfish fisheries, feasibility, bay scallop, Maritime Provinces)
 A 383 (pollution effects, Maritime Provinces)
 CHN 66 (processing, marketing, roe, Atlantic herring, Maritime Provinces)
- Resource management
 J 35(2) : 235 (mathematical models, regional development, Kemano II, Skeena R., B.C.)
- MSP 39 (human food, fisheries, aquaculture, Canada)
 S 2490 (seals, Northern Hemisphere)
 A 381 (territorial waters, environmental factors, Canada)
- Respiration
 J 35(5) : 637 (petroleum hydrocarbons, pollution effects, soft-shell clam)
 (10): 1316 (oxygen transport, eggs, coho salmon)
- Rhabdochona kisutchi* (Nematoda)
 S 2426 (new species)
- Rhabdospira thelohani* (see Cell, rodlet)
- Rhode Island State, USA
 J 35(5) : 536 (petroleum, chronic inputs, sediments, Narragansett Bay, Rhode I. Sound.)
- Rockfish, blackgill (*Sebastes melanostomus*)
 J 35(7) : 981 (larvae, juveniles, developmental stages, Calif., Baja Calif.)
- Rockfish, copper (*Sebastes caurinus*) (*Sebastodes caurinus*)
 S 2454 (metallothioneins, liver)
- Rockfishes (*Sebastes* spp.) (see also names of species)
 T 768 (trawl nets, fishing power, statistical analysis, Queen Charlotte Sound, B.C.)
 D 88 (catch statistics, midwater trawls, Vancouver I., B.C.)
 S 2472 (parasitism, *Peniculus asinus*)
- Roe (see Fish eggs)
- S
- Sablefish (*Anoplopoma fimbria*) (blackcod)
 D 51 (processing fishery products, freezing storage)
 77 (tagging, migrations, aging methods, B.C.)
- Saint John River, N.B.
 T 745 (pollution effects, agricultural runoff, forest industry, brook trout, slimy sculpin, benthos)
- Salinity
 J 35(6) : 910 (orientation behavior, recording equipment, gulf killifish)
 D 95 (surface water, graphs, NE Pac.)
- Salmincola* (see Copepoda)
- Salmo clarki* (see Trout, cutthroat)
gairdneri (see Trout, rainbow; Trout, steelhead)
salar (see Salmon, Atlantic)
trutta (see Trout, brown)

- Salmon (Pacific in general) (*Oncorhynchus* spp.)
- J 35(2) : 235 (mathematical models, fishery management, Kemano II, Skeena R., B.C.)
- (6) : 797 (juveniles, predation, population dynamics, B.C.)
- (6) : 903 (viral diseases, erythrocytes, experimental research)
- (10) : 1303 (production, limiting factors, marine environment)
- (11) : 1434 (survival, marine environment)
- T 743 (bibliographies, eggs, alevins)
- 746 (identification keys, field characters, marine environment)
- 788 (abundance, distribution, feeding behavior, Strait of Georgia, B.C.)
- M 1443 (documents, fishery data, data storage, Pac.Biol.Stn.)
- 1447 (pulpmill effluents, pollution effects, bioassays, Neroutsos Inlet, B.C.)
- D 52 (streams, escapement, Queen Charlotte Is., B.C.)
- 72 (streams, escapement, Queen Charlotte Is., B.C.)
- 88 (catch statistics, midwater trawls, Vancouver I., B.C.)
- 90 (catch statistics, intertidal environment, Nanaimo R., Strait of Georgia, B.C.)
- S 2434 (boron, toxicity tests)
- 2438 (pulpmill effluents, toxicity, Fraser R., B.C.)
- A 362 (bacteria, bacterial diseases, gills)
- 376 (fishery resources, roe, B.C.)
- 397 (bioassays, pulpmill effluents, pollution effects)
- Salmon, Atlantic (*Salmo salar*)
- J 35(1) : 43 (stock identification, scale characteristics, NE coast, North America)
- (1) : 60 (sea growth, river growth, juveniles, Western Arm Brook, Nfld.)
- (1) : 76 (oceanodromous migrations, smolts, Penobscot R. estuary, Me.)
- (1) : 93 (seawater adaptation, parr-smolt transformation, migrations)
- (1) : 145 (sexual maturity, population genetics, environmental factors)
- (2) : 166 (toxicity, cyanides, embryogenesis)
- (2) : 175 (habitat, spatial relations, juveniles, streams, Miramichi R., Nashwaak R., N.B.)
- (3) : 329 (feeding behavior, alevins)
- (6) : 907 (juveniles, leaping, environmental factors)
- (9) : 1269 (sexual maturity, rearing, smolts)
- (12) : 1542 (ATP, gills, smolts)
- T 688 (food conversion, nutrients, proteins, seawater)
- 696 (pollution effects, heavy metals, Miramichi R., Nepisiquit R., Restigouche R., N.B.)
- 733 (monitoring stations, portable weirs, Nfld.)
- 737 (bioaccumulation, excretion, hydrocarbons)
- 785 (spawning grounds, gravel, physical properties, streams, N.B.)
- M 1441 (sport fishing statistics, catch/effort, Little Main Restigouche R., N.B.)
- 1444 (sport fishing statistics, catch/effort, Cains R., Miramichi R. system, N.B.)
- 1461 (by catch, fishing gear, landing statistics, Nfld., Labrador)
- D 84 (catch/effort, angling, Nfld., Labrador)
- S 2419 (automatic feeder, fry)
- 2422 (migrations, ultrasonic tracking, Miramichi R. estuary, N.B.)
- 2442 (aromatics, bioaccumulation)
- 2474 (polymorphism, enzymes, Ireland)
- 2475 (parasites, *Anisakis simplex*, NW Atl.)
- Salmon, chinook (*Oncorhynchus tshawytscha*)
- J 35(1) : 1 (temperature effects, *Aeromonas salmonicida*, *A. hydrophila*)
- (1) : 69 (temperature effects, hatching time)
- (3) : 345 (fish handling, anesthetics)
- (7) : 1009 (cell culture, bioassays, viruses)
- T 761 (bioassays, osmoregulation)
- M 1438 (fry, body size, seasonal variations, Nanaimo R., B.C.)
- 1453 (smolts, rearing, tagging, Fulton R., B.C.)
- 1460 (scales, subpopulation, escapement, Fraser R., B.C.)
- D 57 (sampling, tagging, B.C.)
- S 2415 (deoxyribonuclease, testes)
- Salmon, chum (*Oncorhynchus keta*)
- J 35(6) : 880 (mercury, toxicity, cytoplasm)
- M 1438 (fry, body size, seasonal variations, Nanaimo R., B.C.)
- Salmon, coho (*Oncorhynchus kisutch*)
- J 35(1) : 1 (temperature effects, *Aeromonas salmonicida*, *A. hydrophila*)
- (1) : 8 (temperature effects, bacterial kidney disease)
- (4) : 403 (aquaculture, vibriosis, serological studies, Me.-N.H.)
- (6) : 893 (steroids, blood, tissues)
- (6) : 907 (juveniles, leaping, environmental factors)
- (8) : 1124 (heavy metals, toxicity, fatigue)
- (10) : 1285 (pollution effects, chemical pollutants, endocrine glands)
- (10) : 1316 (eggs, respiration)
- (11) : 1401 (indicator species, chemical pollutants, L. Ontario)
- (11) : 1423 (hormones, oocyte maturation, ovulation)
- T 748 (fertility, wild coho salmon, pen-reared coho salmon)
- 761 (bioassays, osmoregulation)
- D 57 (sampling, tagging, B.C.)

- S 2412 (hormones, growth regulators, food conversion)
 2426 (parasites, *Rhabdochona kisutchi*, B.C.)
 2470 (growth, morphology, endocrine glands)
 2471 (hormones, growth regulators, insulin)
- Salmon, pink (*Oncorhynchus gorbuscha*)
 J 35(10): 1373 (sexual maturity, spawning, introduced species, L. Superior)
 T 766 (aquaculture techniques, incubation, production)
 S 2502 (induced breeding, gonadotropin, aquaculture techniques)
- Salmon, sockeye (*Oncorhynchus nerka*)
 J 35(1): 8 (temperature effects, bacterial kidney disease)
 (2): 220 (body size, swimming speed, foraging)
 (6): 851 (stock assessment, echo surveys, population characteristics, Great Central L., Vancouver I., B.C.)
 (7): 1003 (ammonia, metabolism)
 (12): 1572 (introduced species, interspecific relationships, kokanee, L. Tahoe, Calif.-Nev.)
 (12): 1580 (habitat improvement, lake fertilization, Great Central L., Vancouver I., B.C.)
 T 740 (lake enrichment, B.C.)
 744 (spawning grounds, enhancement program, kokanee, Meadow Creek, Kootenay L., B.C.)
 780 (growth, temperature effects, biological rhythms)
 D 69 (catch statistics, fishery management, juveniles, Babine L., B.C.)
 S 2421 (oceanodromous migrations, ultrasonic tracking, Fraser R., B.C.)
 2469 (growth hormones, osmoregulation)
- Salmonidae
 J 35(6): 875 (viruses, disease control, ozone)
 (10): 1359 (stomach flushing, food consumption, sampling)
 (11): 1451 (IPNV, experimental research)
 T 743 (bibliographies, eggs, alevins)
 777 (feeding behavior, estuarine environment, coastal zone, La Grande R. system, James Bay)
 779 (fish culture, aquaculture techniques, Norway)
 D 81 (stocking organisms, production, distribution, salmonids, N.B., N.S., P.E.I.)
- Salvelinus alpinus* (see Char, Arctic)
fontinalis (see Trout, brook)
namaycush (see Trout, lake)
- Samplers
 J 35(3): 332 (benthic invertebrates)
 (6): 901 (gear construction, aquatic organisms)
 T 738 (benthos, harpacticoid copepods)
- Sampling (biological)
 J 35(3): 332 (diving, benthic invertebrates, Penobscot R., Me.)
 (10): 1359 (stomach content, stomach flushing, salmonids)
 T 770 (benthos, cost analysis)
 D 41 (data processing, zoobenthos, Beaufort Sea)
 57 (tagging, chinook salmon, coho salmon, B.C.)
 92 (otter trawls, invertebrates, fishes, Bute Inlet, Jervis Inlet, Howe Sound, B.C.)
- Sampling (statistical)
 J 35(9): 1207 (time series analysis, zooplankton, Scotian Shelf)
- Saskatchewan (Province), Canada (see also Hamell Lake)
 S 2482 (aquaculture, survival, rainbow trout, lakes)
- Saxitoxin (see Poisons (biological))
- Sayomyia* (see *Chaoborus* (*Sayomyia*) *brasiliensis*)
- Scales
 J 35(1): 43 (statistical analysis, stock identification, Atlantic salmon, NE coast, North America)
 M 1460 (scale reading, subpopulation, chinook salmon, Fraser R., B.C.)
- Scallop, bay (*Argopecten irradians*)
 T 778 (resource development, feasibility, Maritime Provinces)
- Scallop, sea (*Placopecten magellanicus*)
 M 1432 (surveys, biological data, Northumberland Strait, Gulf of St. Lawrence)
- Scallops (Mollusca) (see also names of species)
 J 35(4): 409 (cadmium, polarographic studies)
- Scientific personnel
 MSP 36 (directories, ocean industry, Canada)
- Scomber scombrus* (see Mackerel, Atlantic)
- Scotian Shelf (off N.S.)
 J 35(4): 414 (water mixing, nutrients, mathematical models)
 (9): 1207 (sampling, time series analysis, zooplankton)
 T 742 (biomass, ecological associations, zooplankton, phytoplankton)
 S 2476 (hydrocarbons, chemical composition, sediment analysis)
 2503 (age composition, growth, geographic distribution, silver hake)
- Scotland
 J 35(10): 1330 (life cycle, body size, copepods, Loch Striven)

- Sculpin, slimy (*Cottus cognatus*)
 T 745 (pollution effects, agricultural runoff, forest industry, Saint John R., N.B.)
- Sea ice
 S 2506 (nutrient cycles, arctic zone)
- Sea law
 A 381 (territorial waters, resource management, environmental factors, Canada)
 382 (pollution control, World Oceans)
- Sea level
 D 65 (graphs, variations, Alert Bay, Tofino, Point Atkinson, Prince Rupert, B.C.)
- Sea raven (*Hemitripterus americanus*)
 S 2423 (heat transfer, gills, body walls)
- Seal, bearded (*Erignathus barbatus*)
 S 2461 (orientation behavior, juveniles, Baffin I., Victoria I., N.W.T.)
- Seal, fur (*Callorhinus ursinus*)
 M 1471 (sexual reproduction, nutritional requirements, captivity)
 S 2454 (metallothioneins, liver)
- Seal, grey (*Halichoerus grypus*) (gray seal)
 S 2454 (metallothioneins, liver)
 A 392 (stock assessment, ecology, Baltic)
- Seal, harbor (*Phoca vitulina*)
 J 35(6) : 844 (predators, lake trout, brook trout, Lower Seal I., Que.)
 A 392 (stock assessment, ecology, Baltic)
- Seal, harp (*Pagophilus groenlandicus*) (*Phoca groenlandica*)
 J 35(9) : 1249 (mortality, production, potential yield, NW Atl.)
 I 98 (fishery management, economics, sociological aspects, East coast, Canada)
 S 2478 (fatty acids, chemical properties, biosynthesis)
 A 393 (pollution effects, oil spills, Beaufort Sea)
- Seal, hooded (*Cystophora cristata*)
 I 98 (fishery management, economics, sociological aspects, East coast, Canada)
- Seal, ringed (*Phoca hispida*) (*Pusa hispida*)
 S 2461 (orientation behavior, juveniles, Baffin I., Victoria I., N.W.T.)
 2462 (predator, northern wolffish, Amundsen Gulf, N.W.T.)
 A 392 (stock assessment, ecology, Baltic)
 393 (pollution effects, oil spills, Beaufort Sea)
- Seals (Pinnipedia) (see also names of species)
 S 2490 (population characteristics, conservation, resource management, Northern Hemisphere)
- Seaweeds
 J 35(5) : 745 (*Fucus macrofauna*, pollution effects, Gästviken, Sweden)
 T 789 (surveys, Queen Charlotte Strait, Johnstone Strait, B.C.)
 M 1430 (charts, spawning grounds, Pacific herring, Nuchatlitz, Nootka Sound, Hesquiat Harbour, Barkley Sound, Vancouver I., B.C.)
 1433 (charts, spawning grounds, Pacific herring, Ganges Harbour, Vancouver I., B.C.)
 S 2414 (nutritive value, *Nereocystis leutkeana*, diets, hogs)
 2501 (petroleum, dispersants, pollution effects, *Laminaria*, *Phyllophora*, arctic zone)
- Sebastes alutus* (see Perch, Pacific ocean)
caurinus (see Rockfish, copper)
marinus (see Redfish)
melanostomus (see Rockfish, blackgill)
mentella (see Redfish)
 spp. (see Redfish; Rockfish)
- Sebastes caurinus* (see Rockfish, copper)
- Sedimentation
 J 35(8) : 1089 (nitrogen, phosphorus, carbon, Char L., N.W.T.)
 (12): 1604 (seasonal variations, vertical distribution, suspended matter, Bedford Basin, N.S.)
 (12): 1614 (suspended matter, settling velocity, Bedford Basin, N.S.)
 (12): 1621 (sediments, oxygen consumption, seasonal variations, Bedford Basin, N.S.)
- Sediments; Sediment analysis
 J 35(5) : 510 (aromatic hydrocarbons, Buzzards Bay, Mass.)
 (5) : 528 (aromatic hydrocarbons, oil spills, Chedabucto Bay, N.S.)
 (5) : 536 (petroleum, chronic inputs, Narragansett Bay, Rhode I. Sound, R.I.)
 (5) : 552 (petroleum hydrocarbons, weathering, Searsport, Me.)
 (5) : 581 (bacteria, hydrocarbons, Chedabucto Bay, N.S.)
 (5) : 591 (petroleum, weathering, *Arenicola marina*)
 (5) : 608 (aromatic hydrocarbons, bioaccumulation, bivalves, sipunculid)
 (5) : 657 (aromatic hydrocarbons, bioavailability, English sole)
 (5) : 776 (sediment, hydrocarbons, benthos, recruitment, Sequim Bay, Wash.)
 T 696 (heavy metals, estuaries, NE N.B.)
 775 (interstitial environment, copper, Howe Sound, B.C.)
 782 (benthic environment, Bay of Fundy)
 M 1431 (surveys, Northumberland Strait, Gulf of St. Lawrence)

- D 41 (marine sediments, Beaufort Sea)
 S 2453 (copper, Rupert Inlet, Holberg Inlet, Vancouver I., B.C.)
 2457 (hydrocarbons, fats, Dead Sea)
 2476 (hydrocarbons, Scotian Shelf)
- Selenium
 S 2459 (human food, fishery products)
 2500 (toxicity, swordfish, NW Atl.)
- Semotilus atromaculatus* (see Chub, creek)
- Serological studies
 J 35(6) : 828 (antibodies, fluorescence, *Myxosoma cerebralis*)
 S 2409 (steroids, fish plasma)
- Serviceberry, Saskatoon (*Amelanchier alnifolia*)
 S 2511 (toxicity, prunasin, B.C.)
- Sewage effluents
 T 709 (toxicity, fishes, invertebrates)
 A 388 (conferences, seawater pollution)
- Sexual maturity
 J 35(1) : 145 (environmental factors, population genetics, Atlantic salmon)
 (6) : 912 (statistical analysis, reproduction, aquatic mammals)
 (9) : 1269 (smolts, Atlantic salmon)
 (10) : 1373 (introduced species, pink salmon, L. Superior)
 S 2502 (induced breeding, gonadotropin, aquaculture techniques, pink salmon)
- Shad, American (*Alosa sapidissima*)
 J 35(11) : 1469 (reproductive behavior, life history, subpopulation, NW Atl.)
- Sheepshead (*Archosargus probatocephalus*)
 J 35(4) : 470 (cell culture, virology)
- Shellfish (see also names of species)
 J 35(4) : 409 (cadmium, polarographic studies)
 T 763 (mercury, pollution monitoring, Howe Sound, B.C.)
 M 1431 (surveys, Northumberland Strait, Gulf of St. Lawrence)
 1432 (surveys, Northumberland Strait, Gulf of St. Lawrence)
 D 85 (toxicity, monitoring, N.B., N.S.)
 S 2416 (arsenic compounds, measurement, analytical techniques)
- Shellfish culture
 J 35(12) : 1643 (ammonia production, brine shrimp)
 T 781 (breeding, seed collection, Pacific oyster, Pendrell Sound, Ladysmith Harbour, Hotham Sound, B.C.)
 S 2417 (pheromones, culture tanks, American lobster)
 2468 (feeding, larvae, American lobster)
- Shellfish fisheries
 T 687 (quality control, depuration, soft-shell clam, Digby, N.S.)
 778 (resource development, feasibility, bay scallop, Maritime Provinces)
- Shrimp, brine (*Artemia salina*)
 J 35(12) : 1643 (ammonia production, shellfish culture)
- Shrimp, northern pink (*Pandalus borealis*)
 I 101 (exploratory fishing, catching methods, midwater trawls, Gulf of St. Lawrence)
- Shrimp, opossum (*Mysis relicta*)
 J 35(9) : 1165 (life history, population number, L. Michigan)
 (12) : 1572 (introduced species, inter-specific relationships, L. Tahoe, Calif.-Nev.)
- Siberia, USSR
 S 2432 (taxonomy, *Salmincola longimanus*)
- Sipunculoidea
 J 35(5) : 608 (bioaccumulation, aromatic hydrocarbons, sediments, *Phascolosoma*)
- Skeena River, B.C.
 J 35(2) : 235 (mathematical models, regional development, resource management, Kemano II)
- Skeletonema* (see Diatoms)
- Smelt, rainbow (*Osmerus mordax*)
 J 35(11) : 1457 (predator, lake herring larvae, L. Superior)
- Smolts
 J 35(9) : 1269 (rearing, seawater, Atlantic salmon)
 M 1453 (tagging, chinook salmon, Fulton R., B.C.)
- Snails (Gastropoda)
 J 35(8) : 1109 (toxicity, lead, *Lymnaea*)
 S 2413 (development, *Batillaria zonalis*, Fanny Bay, B.C.)
- Soils
 S 2504 (chemical analysis, herbicides, analytical techniques)
- Solar radiation
 S 2433 (phytoplankton, photosynthesis, Alberni Inlet, B.C.)
- Sole, Dover (*Microstomus pacificus*)
 I 94 (stock assessment, production, Hecate Strait, Queen Charlotte Sound, B.C.)
 99 (exploratory fishing, stock assessment, NE Pac.)
- Sole, English (*Parophrys vetula*)
 J 35(5) : 657 (aromatic hydrocarbons, bio-availability)
- Sole, petrale (*Eopsetta jordani*)
 I 94 (stock assessment, production, Hecate

- Strait, Queen Charlotte Sound, B.C.)
- Sole, rock (*Lepidopsetta bilineata*)
- I 94 (stock assessment, production, Hecate Strait, Queen Charlotte Sound, B.C.)
- Spawning: Spawning behavior
- J 35(10): 1373 (introduced species, pink salmon, L. Superior)
- MSP 38 (eggs, quantitative distribution, Pacific herring, B.C.)
- M 1437 (fishery surveys, Pacific herring, Nanoose Bay, B.C.)
- D 52 (streams, escapement, Pacific salmon, Queen Charlotte Is., B.C.)
- 72 (streams, escapement, Pacific salmon, Queen Charlotte Is., B.C.)
- Spawning grounds
- T 744 (enhancement program, sockeye salmon, Meadow Creek, Kootenay L., B.C.)
- 785 (physical properties, gravel, Atlantic salmon, streams, N.B.)
- M 1430 (vegetation, Pacific herring, Nuchatlitz, Nootka Sound, Hesquiat Harbour, Barkley Sound, Vancouver I., B.C.)
- 1433 (vegetation, Pacific herring, Ganges Harbour, Vancouver I., B.C.)
- 1437 (fishery surveys, Pacific herring, Nanoose Bay, B.C.)
- D 78 (substrate preferences, fishery surveys, Pacific cod, Vancouver I., B.C.)
- Species, new (see New species)
- Specific gravity
- S 2487 (fats, rapeseed oil, canbra oil)
- Spectroscopic techniques
- S 2459 (photometry, selenium, fishery products)
- Sport fishing; Sport fishing statistics
- M 1441 (catch/effort, Atlantic salmon, brook trout, Little Main Restigouche R., N.B.)
- 1444 (catch/effort, Atlantic salmon, brook trout, Cains R., Miramichi R. system, N.B.)
- 1449 (catch/effort, catch composition, walleye, Bay R., N.W.T.)
- D 47 (surveys, lakes, N.S.)
- 84 (catch/effort, angling, Atlantic salmon, Nfld., Labrador)
- Spruce budworm (*Choristoneura fumiferana*)
- S 2435 (population control, fenitrothion, N.B.)
- Squalus acanthias* (see Dogfish, spiny)
- St. Georges Bay, N.S.
- J 35(8) : 1116 (water circulation, water exchange, fish larvae)
- (12): 1631 (water circulation, mathematical models)
- St. Lawrence, Gulf of (see also Northumberland Strait)
- T 747 (fishery surveys, ichthyoplankton)
- I 101 (exploratory fishing, midwater trawls, northern pink shrimp)
- 104 (exploratory fishing, trap nets, by catch, whelks, snow crab)
- A 367 (fishery resources, quota regulations, redfish)
- St. Lawrence River Estuary
- J 35(3) : 338 (quantitative distribution, trace elements, suspended matter, Saguenay fjord)
- (9) : 1171 (phytoplankton, temporal distribution, primary production)
- (12): 1518 (community composition, ecological distribution, population number, ichthyoplankton)
- St. Margaret's Bay, N.S.
- S 2389 (temporal variability, vertical distribution, biomass, chlorophyll a)
- St. Pierre Bank (off Nfld.)
- J 35(9) : 1199 (fecundity, witch flounder)
- Staining
- J 35(10): 1363 (dyes, zooplankton)
- Statistical analysis
- J 35(1) : 43 (scale characteristics, Atlantic salmon, NE coast, North America)
- (2) : 184 (age-length key, bias, Pacific ocean perch)
- (6) : 912 (sexual maturity, aquatic mammals)
- T 768 (fishing power, trawl nets, rock-fishes, Queen Charlotte Sound, B.C.)
- M 1439 (population dynamics, swordfish)
- Stenurus globicephalae* (see Nematoda)
- Steroids
- J 35(6) : 893 (radioactivity, tissues, blood, coho salmon)
- S 2409 (fish plasma, radioimmunoassay)
- Stimuli
- J 35(9) : 1265 (limiting factors, lag adjustment, aquatic organisms)
- S 2497 (chemical stimuli, amino acids, olfaction)
- Stizostedion vitreum vitreum* (see Walleye)
- Stock assessment
- J 35(6) : 851 (population characteristics, echo surveys, sockeye salmon, Great Central L., Vancouver I., B.C.)
- T 735 (fishery resources, Atlantic oyster, Caraquet Bay, N.B.)
- M 1439 (methodology, swordfish)
- 1442 (biomass, Pacific herring, B.C.)

- 1455 (population density, population structure, commercial species, abalone, Moresby I., B.C.)
- D 42 (Pacific ocean perch, Queen Charlotte Sound, B.C.)
- 78 (fishery surveys, Pacific cod, Vancouver I., B.C.)
- I 94 (groundfish, Hecate Strait, Queen Charlotte Sound, B.C.)
- S 2401 (finback whale, NW Atl.)
- 2403 (northern bottlenose whale, N Atl.)
- 2491 (seasonal variations, sei whale, NW Atl.)
- A 392 (methodology, ecology, ringed seal, grey seal, harbor seal, Baltic)
- Stock identification**
- J 35(1) : 43 (statistical analysis, scale characteristics, Atlantic salmon, NE coast, North America)
- (1) : 117 (electrophoresis, proteins, Atlantic cod, Laurentian Channel, Flemish Cap, NW Atl.)
- (1) : 124 (multivariate analysis, meristic counts, morphology, capelin, Atl. coast, Canada)
- Stocking (organisms)**
- J 35(4) : 391 (survival, brook trout, lakes, Ont.)
- D 81 (production, distribution, salmonids, N.B., N.S., P.E.I.)
- Stomach content**
- J 35(10) : 1359 (sampling, stomach flushing, salmonids)
- Storage**
- J 35(4) : 452 (freezing storage, storage effects, capelin)
- (4) : 473 (chilling storage, quality control, Pacific herring, NE Pac.)
- T 783 (chilling storage, seawater, quality control)
- I 97 (quality control, American oyster)
- S 2408 (freezing storage, proteins, minced products, red hake, flatfishes)
- 2449 (chilling storage, storage effects, organoleptic properties, witch flounder)
- Storage effects**
- J 35(2) : 253 (freezing storage, lipid oxidation, suckers)
- (4) : 452 (freezing storage, capelin)
- (7) : 976 (cold storage, capelin)
- T 753 (freezing storage, walleye pollock, Pacific cod)
- 794 (frozen products, weight loss, fish)
- S 2386 (frozen products, minced products, fish)
- 2449 (chilling storage, organoleptic properties, witch flounder)
- St. Pierre Bank (off Nfld.)**
- J 35(9) : 1199 (fecundity, witch flounder)
- Strait of... (see name of strait)**
- Strongylocentrotus droebachiensis* (see Urchin, green sea)
- franciscanus* (see Urchin, red sea)
- purpuratus* (see Urchin, purple sea)
- Subpopulation**
- J 35(11) : 1469 (life history, reproductive behavior, regional variations, American shad, NW Atl.)
- M 1460 (escapement, chinook salmon, Fraser R., B.C.)
- Sucker, white (*Catostomus commersoni*)**
- J 35(7) : 963 (heavy metals, pollution effects, fatigue, Hamell L., Sask.)
- Suckers (*Catostomidae*)**
- J 35(2) : 253 (frozen products, lipid oxidation)
- Sulfur compounds**
- M 1468 (acid precipitation, St. Andrews, N.B.)
- Sunfish, longear (*Lepomis megalotis*)**
- J 35(1) : 131 (reproductive behavior, habitat, Thames R., Ont.)
- Superior, Lake, America**
- J 35(10) : 1373 (introduced species, sexual maturity, spawning, pink salmon)
- (11) : 1457 (predation, rainbow trout, herring larvae)
- Surface water**
- D 95 (salinity, graphs, NE Pac.)
- Surfactants**
- S 2495 (pollution effects, cunner)
- Surveys (see also Fishery surveys)**
- T 713 (underwater photography, pollution monitoring, ocean dumping, Strait of Georgia, B.C.)
- M 1431 (biological data, benthos, demersal fishes, sediments, Northumberland Strait)
- 1432 (biological data, shellfish, Northumberland Strait)
- 1436 (marine resources, Pacific Rim National Park, B.C.)
- 1467 (marine resources, Pacific Rim National Park, B.C.)
- D 47 (physical properties, chemical properties, sport fishing, lakes, N.S.)
- 64 (water quality, Sherbrooke L., N.S.)
- A 359 (environmental surveys, Mackenzie R. delta, N.W.T.)
- Survival**
- J 35(11) : 1434 (marine environment, Pacific salmon)
- Suspended matter**
- J 35(3) : 338 (trace elements, quantitative distribution, Saguenay fjord, St.

- Lawrence R. estuary)
 (12): 1604 (sedimentation, Bedford Basin, N.S.)
 (12): 1614 (settling velocity, sedimentation, Bedford Basin, N.S.)
 D 56 (size distribution, chemical composition, Bedford Basin, N.S.)
 74 (carbon, Experimental Lakes Area, NW Ont.)
- Sweden
 J 35(5) : 745 (oil spills, pollution effects, *Fucus* macrofauna, Gästviken)
- Swordfish (*Xiphias gladius*)
 M 1439 (population dynamics, stock assessment, methodology)
 2500 (mercury compounds, selenium, toxicity, NW Atl.)
- Sympatric populations
 J 35(1) : 131 (reproductive behavior, habitat, pumpkinseed, longear sunfish, Thames R., Ont.)
 M 1434 (interspecific relationships, growth, population density, cut-throat trout, Vancouver, I., B.C.)
- Synecology
 S 2466 (benthos, sublittoral zone)
- T
- Taeniopteryx* (see *Plecoptera*)
- Tagging
 J 35(1) : 143 (radioisotopes, predation, convict cichlid)
 M 1452 (juveniles, steelhead trout, Fulton R., B.C.)
 1453 (smolts, chinook salmon, Fulton R., B.C.)
 D 57 (biological data, chinook salmon, coho salmon, B.C.)
 77 (migrations, aging methods, sablefish, NE Pac.)
 S 2394 (visual tags, whales)
 2397 (ear plugs, aging methods, finback whale)
 2400 (ear plugs, staining, aging methods, baleen whales)
- Tahoe, Lake, California-Nevada, USA
 J 35(12): 1572 (introduced species, interspecific relationships, kokanee, opossum shrimp)
- Tanks
 T 728 (test equipment, fishes, aquatic organisms)
 S 2467 (research equipment, planktonology)
- Taxonomy
 J 35(9) : 1223 (*Ectocotyla*)
 (10): 1381 (*Exosphaeroma inornata*, *E. media*, phenotypes)
 (12): 1537 (subpopulation, Arctic char, Gros Morne National Park, Nfld.)
- S 2390 (*Conispora renalis*, new genus, new species, Strait of Georgia, B.C.)
 2418 (*Salmincola cottidarum*)
 2426 (*Rhabdochona kisutchi*, new species)
 2432 (*Salmincola longimanus*, Siberia)
 2465 (Prochlorophyta, Cyanophyta)
 2472 (*Peniculus asinus*, new species, NE Pac.)
 2498 (*Chaoborus* (*Sayomyia*) *brasiliensis*, *C. (Edwardsops) magnificus*, Venezuela)
- Telemetry
 S 2421 (ultrasonic tracking, oceanodromous migrations, sockeye salmon, Fraser R., B.C.)
 2422 (ultrasonic tracking, migrations, Atlantic salmon, Miramichi R. estuary, N.B.)
 A 377 (data processing, recording equipment)
 378 (data processing, recording equipment)
- Teleostei
 T 732(1) (*Abramis* to *Clinostomus*, reproduction, bibliographies)
 732(2) (*Clupea* to *Ompok*, reproduction, bibliographies)
 732(3) (*Oncorhynchus* to *Zygionectes*, reproduction, bibliographies)
- Temperature
 J 35(11) : 1464 (temperature preference, environmental factors, white perch)
 D 67 (water, bathythermographic data, Queen Charlotte Sound, B.C., Vancouver I., B.C.)
- Temperature effects
 J 35(1) : 1 (*Aeromonas salmonicida*, *A. hydrophila*, coho salmon, chinook salmon, steelhead trout)
 (1) : 8 (bacterial kidney disease, coho salmon, sockeye salmon, steelhead trout)
 (1) : 69 (hatching time, chinook salmon)
 (2) : 261 (supersaturation, survival, developmental stages, steelhead trout)
 (3) : 279 (population dynamics, catch/effort, mathematical models, Atlantic cod, yellowtail flounder, Scotian Shelf, Gulf of Maine, NW Atl.)
 (6) : 866 (seasonal variations, aquatic plants, rivers, Ont.)
 (11): 1417 (locomotion, acceleration, rainbow trout)
 (11): 1430 (orientation behavior, fingerlings, rainbow trout)
 T 780 (thermal aquaculture, growth, sockeye salmon)
- Tetrahoe* (see *Cestoda*)
- Thawing
 CHN 64 (fillet blocks, Atlantic herring)

- Theragra chalcogramma* (see Pollock, walleye)
- Thermal plumes
J 35(6) : 885 (environmental effects, horizontal distribution, fishes, Great Lakes)
- Thompson River, B.C.
T 758 (pollution effects, industrial wastes, algae)
- Tilapia mossambica* (see Mouthbrooder, mozambique)
- Toxicants; Toxicity; Toxicity tests
J 35(1) : 35 (cadmium, mortality, goldfish)
(2) : 166 (cyanides, embryos, fry, Atlantic salmon)
(3) : 286 (arsenic, cadmium, diatom)
(6) : 822 (nitrites, therapy, steelhead trout)
(6) : 880 (mercury, cytoplasm, zooplankton, chum salmon)
(7) : 997 (polychlorinated biphenyls, fathead minnow)
(7) : 1012 (ammonia, ions, seawater)
(8) : 1060 (naphthalene, mummichog)
(8) : 1084 (polychlorinated biphenyls, sublethal effects, brook trout)
(8) : 1109 (lead, freshwater snails)
(8) : 1124 (heavy metals, biological fatigue, coho salmon)
(10) : 1366 (heavy metals, cultured organisms, calanoid copepod)
(10) : 1388 (seasonal variations, industrial wastes, rainbow trout)
T 709 (sewage effluents, fishes, invertebrates)
710 (monitoring, pH, flow-through system)
712 (chlorine, domestic wastes, Red R., Man.)
D 85 (monitoring, shellfish, N.B., N.S.)
S 2430 (dispersants, oil spills)
2435 (fenitrothion, environmental effects)
2437 (fatty acids, resin acids, fishes)
2438 (detoxication, pulpmill effluents, Fraser R., B.C.)
2446 (arsenic, aquatic environment, literature reviews)
2480 (nonachlor, chlordane, aquatic animals, East coast, Canada)
2483 (pesticides, rainbow trout)
2486 (behavior, experimental research, *Gammarus pseudolimnaeus*)
2515 (pulpmill effluents, *Anisogammarus pugettensis*)
- Toxins (see Poisons (biological))
- Trace elements
J 35(3) : 338 (quantitative distribution, suspended matter, Saguenay fjord, St. Lawrence R. estuary)
- Transportation
A 394 (arctic zone, N.W.T.)
- Trap fishing
T 771 (gear selectivity, rock crab, toad crab)
- Trap nets
I 104 (mesh selectivity, whelks, snow crab, Gulf of St. Lawrence)
- Trawlers
MSP 40 (experimental fishing, factory ships, N Atl.)
- Trawling; Trawls
T 768 (fishing power, statistical analysis, rockfishes, Queen Charlotte Sound, B.C.)
I 101 (midwater trawls, catching methods, northern pink shrimp, Gulf of St. Lawrence)
- Trematoda
J 35(10) : 1356 (new records, digenea trematodes, *Pholeter gastrophilus*, *Oschmarinella laevicaecum*, digestive tract, white-sided dolphin)
- Trophodynamic cycle
J 35(2) : 247 (degradation, leaves, streams)
- Trout, brook (*Salvelinus fontinalis*)
J 35(4) : 391 (fish culture, survival, lakes, Ont.)
(6) : 844 (predation, harbor seals, Lower Seal L., Que.)
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- 22F. Vallentyne, J. R. 1978. L'homme, les lac et la prolifération des algues. 196 p. (Canada \$3.75, autres pays \$4.50; S'adresser à: Approvisionnement et Services Canada, Imprimerie et édition, Ottawa, Canada K1A 0S9.)
- 27F. Smith, L. S. et G. R. Bell. 1978. Guide pratique de l'anatomie et de la physiologie du saumon du Pacifique. 15 p. (Canada \$2.50, autres pays \$3.00; S'adresser à: Approvisionnement et Services Canada, Imprimerie et édition, Ottawa, Canada K1A 0S9.)
- 30F. Dingle, J. R. 1978. Procédés de traitement et de conservation du maquereau. Etude et bibliographie annotée. 69 p. (Canada \$3.00, autres pays \$3.60; S'adresser à: Approvisionnement et Services Canada, Imprimerie et édition, Ottawa, Canada K1A 0S9.)
- 35F. Brown, K. père. 1978. Nouvelle orientation vers le Nord. 25 p. (Canada \$2.00, autres pays \$2.40; S'adresser à: Approvisionnement et Services Canada, Imprimerie et édition, Ottawa, Canada K1A 0S9.)
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- 37F. Ministère des Pêches et de l'Environnement. 1978. Manuel d'hydraulique à l'intention des pêcheurs. (Fascicule 1: Machinerie de pont, générateurs de force motrice et transmission, 1^{re} Partie; Principes de transmission hydraulique de l'énergie, 2^e Partie, 10 p. - Fascicule 2: Composants des transmissions, 32 p. - Fascicule 3: Conditionnement de l'huile, 17 p. - Fascicule 4: Normes et symboles des transmissions hydrauliques, 1^{re} Partie: Conception des systèmes, 2^e Partie, 16 p. - Fascicule 5: Installation des systèmes de transmission hydraulique, 30 p. - Fascicule 6: Entretien et dépannage des transmissions hydrauliques, 14 p.) (Chaque fascicule Canada \$2.00, autres pays \$2.40; S'adresser à: Approvisionnement et Services Canada, Imprimerie et édition, Ottawa, Canada K1A 0S9.)
38. Humphreys, R. D., and A. S. Hourston. 1978. British Columbia herring spawn deposition survey manual. 40 p. (Free: Available from Department of Fisheries and the Environment, Fisheries and Marine Service, Pacific Biological Station, Nanaimo, B.C. V9R 5K6.)
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| <p>184FR. Scott, W. B. et E. J. Crossman. 1974. Poissons d'eau douce du Canada. 1026 p. (Canada \$24.95, other countries \$29.95.)</p> <p>190F. Webb, W. B. 1978. Hydrodynamique et énergétique de la propulsion des poissons. 159 p. (Canada \$5.00, other countries \$6.00.)</p> | <p>191R. Ricker, W. E. 1975. Computations and interpretation of biological statistics of fish populations. 382 p. (Canada \$10.50, other countries \$12.60.)</p> <p>194F. Pinhorn, A. T. (éd.). 1978. Ressources marines vivantes de Terre-Neuve et du Labrador: situation actuelle et possibilités d'exploitation. 66 p. (Canada \$4.00, other countries \$4.80.)</p> |
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Abbreviation/Abréviation: T

(NOTE: Numbers 687, 688, 696, 703, 709, 710, 712, 713 and 728 were issued too late for listing and indexing in previous indexes. They are indexed herein. The numerals in parentheses at the end of each reference indicate the name of the establishment from which the information or the Report originated and to which request for a copy can be made. See pages 1658 and 1659 for addresses corresponding to these numerals.)

(REMARQUE: Les numéros 687, 688, 696, 703, 709, 710, 712, 713 et 728 sont sortis trop tard pour les inclure dans les index antérieurs. Le numéro entre parenthèses, à la fin de chaque référence, indique l'établissement d'où provient la documentation du rapport et auquel on peut en demander un exemplaire. Voir aux pages 1658 et 1659 les adresses correspondant à ces numéros.)

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| <p>687. Rowell, T. W., G. Robert, K. B. Swansburg, and R. Davis. 1976. Soft-shell clam depuration, Digby, Nova Scotia. 121 p. (8)</p> <p>688. Lall, S. P., and F. J. Bishop. 1977. Studies on mineral and protein utilization by Atlantic salmon (<i>Salmo salar</i>) grown in seawater. 16 p. (8)</p> <p>696. Ray, S., and W. White. 1977. Some observations on heavy metal concentration in northeastern New Brunswick estuarine surficial sediments. 30 p. (8)</p> <p>703. Fee, E. J., J. A. Shearer, and D. R. DeClercq. 1977. In vivo chlorophyll profiles from lakes in the Experimental Lakes Area, northwestern Ontario. 136 p. (4)</p> <p>709. Alexander, D. G., K. J. Supeene, B. C. Chu,</p> | <p>and H. D. Maciorowski. 1977. The lethal and sublethal effects of secondary-treated sewage effluent on various fish and invertebrates. 21 p. (4)</p> <p>710. Lillie, W. R., and J. F. Klaverkamp. 1977. A system for regulating and recording pH of solutions in aquatic flow-through toxicity tests. 8 p. (4)</p> <p>712. Clarke, R. McV., D. G. Alexander, R. W. Boychuk, B. S. C. Chu, and H. D. Maciorowski. 1977. The effect of chlorination on the acute lethal toxicity of Winnipeg municipal wastes. 16 p. (4)</p> <p>713. McDaniel, N. G., R. D. Macdonald, J. J. Dobrocky, and C. D. Levings. 1977. Biological surveys using in-water photography at three ocean disposal sites in the Strait of Georgia, British Columbia. 47 p. (3)</p> |
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728. Scherer, E., K. R. Scott, and S. H. Nowak. 1977. A modular large-scale laboratory system to acclimate and test aquatic organisms. 10 p. (4)
730. Rogers, I. H., and H. W. Mahood. 1977. The use of a macroreticular resin in the analysis of kraft pulping effluents for resin acids. 13 p. (3)
731. Wojtowicz, M. B., M. G. Fierheller, R. Legendre, and L. W. Regier. 1977. A technique for salting lean minced fish. 15 p. (8)
732. Donaldson, E. M. 1977. Bibliography of fish reproduction 1963-1974. Part 1 - General, non-teleostean species and Teleostei, *Abramis* to *Clinostomus*. Part 2 - Teleostei, *Clupea* to *Ompok*. Part 3 - Teleostei, *Oncorhynchus* to *Zygonectes* and addendum. 572 p. (3)
733. Anderson, T. C., and B. P. McDonald. 1978. A portable weir for counting migrating fishes in rivers. 13 p. (9)
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784. Hourston, A. S. 1978. The decline and recovery of Canada's Pacific herring stocks. 17 p. (1)
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787. Whyte, J. N. C., and J. R. Englar. 1978. Primary organic chemical composition of the marine alga *Macrocystis integrifolia* over the growing season. 22 p. (1)
788. Healey, M. C. 1978. The distribution, abundance, and feeding habits of juvenile Pacific salmon in Georgia Strait, British Columbia. 49 p. (1)

789. Breen, P. A., B. E. Adkins, and G. D. Heritage. 1978. Observations of abalone and subtidal communities made

during a survey of the Queen Charlotte Strait and upper Johnstone Strait areas, July 13-20, 1977. 91 p. (1)

MANUSCRIPT REPORTS/RAPPORTS MANUSCRITS

Abbreviation/Abréviation: M

(NOTE: These reports contain scientific and technical information that represents an important contribution to existing knowledge but which for some reason may not be appropriate for primary scientific (i.e. *Journal*) publication. They differ from Technical Reports in terms of subject scope and potential audience: Manuscript Reports deal primarily with national or regional problems and distribution is generally restricted to institutions or individuals located in particular regions of Canada. The numerals in parentheses at the end of each reference indicate the name of the establishment from which the information or the Report originated and to which request for a copy can be made. See pages 1658 and 1659 for addresses corresponding to these numerals.)

(REMARQUE: Ces rapports contiennent des renseignements scientifiques et techniques qui constituent une contribution importante aux connaissances actuelles mais qui, pour une raison ou pour une autre, ne semblent pas appropriés pour la publication dans un journal scientifique. Ils se distinguent des Rapports techniques par la portée du sujet et le lecteur visé; en effet, ils s'attachent principalement à des problèmes d'ordre national ou régional et la distribution en est généralement limitée aux organismes et aux personnes de régions particulières du Canada. Le numéro entre parenthèses, à la fin de chaque référence, indique l'établissement d'où provient la documentation du rapport et auquel on peut en demander un exemplaire. Voir aux pages 1658 et 1659 les adresses correspondant à ces numéros.)

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| <p>1426. Cook, D. G., J. M. Reinhart, and J. Watson. 1978. (2nd ed. rev.) Guide for preparing Fisheries and Marine Service scientific and technical reports. 14 p. (10)</p> <p>1430. Haegele, C. W., and M. J. Hamey. 1977. Shoreline vegetation maps of some major herring spawning localities on the west coast of Vancouver Island: Nuchatlitz, Nootka Sound, Hesquiat Harbour, and Barkley Sound. 41 p. (1)</p> <p>1431. Caddy, J. F., T. Amaratunga, M. J. Dads-well, T. Edelstein, L. E. Linkletter, B. R. McMullin, A. B. Stasko, and H. W. van de Poll. 1977. 1975 North-umberland Strait Project, Part I: benthic fauna, flora, demersal fish, and sedimentary data. 46 p. (6)</p> <p>1432. Stasko, A. B., T. Amaratunga, and J. F. Caddy. 1977. 1975 Northumberland Strait Project, Part II: commercial shellfish data. 29 p. (6)</p> <p>1433. Haegele, C. W. 1977. Vegetation survey of herring spawning localities in Ganges Harbour, B.C. 17 p. (1)</p> <p>1434. Glova, G. J., and J. C. Mason. 1977. Comparison of coastal cutthroat trout populations in allopatry and those sympatric with coho salmon and</p> | <p>sculpins in several small coastal streams on Vancouver Island, B.C. 35 p. (1)</p> <p>1435. Adkins, B. E., and A. P. Stefanson. 1977. An examination of harvested and un-harvested abalone populations in the Moresby Island area. 23 p. (1)</p> <p>1436. Lee, J. C., and N. Bourne. 1977. Marine resource inventory of Pacific Rim National Park - 1976. 375 p. (1)</p> <p>1437. Haegele, C. W., and R. D. Humphreys. 1977. Assessment of herring spawnings in the vicinity of Nanoose Bay, B.C. 37 p. (1)</p> <p>1438. Healey, M. C., R. V. Schmidt, F. P. Jordan, and R. M. Hungar. 1977. Juvenile salmon in the Nanaimo area 1975: 2. Length, weight, and growth. 147 p. (1)</p> <p>1439. Caddy, J. F. 1977. Some approaches to elucidation of the dynamics of sword-fish (<i>Xiphias gladius</i>) populations. 10 p. (6)</p> <p>1441. Peppar, J. L. 1977. Angling survey, Crown Open water, Little Main Restigouche River, New Brunswick. 24 p. (8)</p> <p>1442. Hourston, A. S., and R. D. Humphreys. 1978. Preliminary forecasts of the available roe catch from British Columbia herring</p> |
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- management units in 1978 and assessments of abundance in 1977. 11 p. (1)
1443. Simpson, K. S., J. R. Carmichael, and C. Groot. 1978. Index to the Pacific Biological Station archives. 95 p. (1)
1444. Peppar, J. L., and P. R. Pickard. 1978. Angling survey of the Cains River, Miramichi River system, New Brunswick, 1976. 20 p. (8)
1445. Caddy, J. F. 1977. Approaches to a simplified yield-per-recruit model for Crustacea, with particular reference to the American lobster, *Homarus americanus*. 14 p. (6)
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1448. Majewski, H. S., R. W. Danell, J. Barica, A. Lutz, and J. F. Klaverkamp. 1978. Short-term exposure of rainbow trout (*Salmo gairdneri*) to an algicidal level of copper sulphate in two hard-water ponds. 10 p. (4)
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1468. Sergeant, D. B., and V. Zitko. 1978. pH and sulphate data of rainwater for July to August 1977 at the Biological Station, St. Andrews, N.B. 6 p. (6)
1471. Bigg, M. A., I. B. MacAskie, and G. Ellis. 1978. Studies on captive fur seals. Progress report no. 2. 21 p. (1)
1472. Cleugh, T. R., C. C. Graham, and R. A. McIndoe. 1978. Chemical, biological and physical characteristics of Lakelse Lake, B.C. 72 p. (12)
1473. Toews, D. A. A., and D. Wilford. 1978. Watershed management considerations for operational planning on T.F.L. #39 (BLK 6A), Graham Island. 32 p. (12)

DATA REPORTS/RAPPORTS STATISTIQUES

Abbreviation/Abréviation: D

(NOTE: These reports provide a medium for filing and archiving data compilations where little or no analysis is included. Such compilations commonly will have been prepared in support of other journal publications or reports. The subject matter of Data Reports reflects the broad interests and policies of the Fisheries and Marine Service, namely, fisheries management, technology and development, ocean sciences and aquatic environments relevant to Canada. The numerals in parentheses at the end of each reference indicate the name of the establishment from which the information or the Report originated and to which request for a copy can be made. See pages 1658 and 1659 for addresses corresponding to these numerals.)

(REMARQUE: Ces rapports servent de base à la compilation des données de classement et d'archives pour lesquelles il y a peu ou point d'analyse. Cette compilation aura d'ordinaire été préparée pour appuyer d'autres publications ou rapports. Les sujets des Rapports statistiques reflètent la vaste gamme de intérêts et politiques du Service des pêches et de la mer, notamment gestion des pêches, techniques et développement, sciences océaniques et environnements aquatiques, au Canada. Le numéro entre parenthèses, à la fin de chaque référence, indique l'établissement d'où provient la documentation du rapport et auquel on peut en demander un exemplaire. Voir aux pages 1658 et 1659 les adresses correspondant à ces numéros.)

41. Wacasey, J. W., E. G. Atkinson, L. Derick, and A. Weinstein. 1977. Zoobenthos data from the southern Beaufort Sea, 1971-1975. 187 p. (5)
42. Harling, W. R., and D. Davenport. 1977. G. B. Reed groundfish cruise no. 77-3, August 22 to September 8, 1977. 46 p. (1)
43. Quay, P. D., R. H. Hesslein, W. S. Broecker, and D. W. Schindler. 1978. The vertical and horizontal distribution of injections of tritiated water in experimental lakes and limnocorrals. 39 p. (4)
44. Barner, L. W., and F. H. C. Taylor. 1977. Herring survey off southwest Vancouver Island in 1973 cruise GBR 73-3. 17 p. (1)
45. Fee, E. J., J. A. Shearer, and D. R. DeClercq. 1978. *In vivo* chlorophyll profiles from lakes in the Experimental Lakes Area, northwestern Ontario - 1976 data. 104 p. (4)
46. Percy, J. A., and J. Walbridge. 1978. Seasonal changes in organic composition and caloric value of an arctic marine amphipod, *Onisimus* (= *Boeckosimus*) *affinus*. 28 p. (5)
47. Richard, D. M. 1977. Survey of thirteen lakes in Antigonish and Guysborough counties, Nova Scotia, 1976. 37 p. (8)
48. Beamish, R. J., M. S. Smith, and R. J. Scarsbrook. 1978. Hake and pollock study, Strait of Georgia cruise, G. B. Reed January 6-February 21, 1975. 206 p. (1)
49. Fulton, J. 1978. Seasonal and annual variations of net zooplankton at Ocean Station P, 1965-1976. 89 p. (1)
50. Cass, A. J., R. J. Beamish, M. S. Smith, and J. R. Scarsbrook. 1978. Hake and pollock study, Strait of Georgia cruise G. B. Reed - March 17-24, 1975. 66 p. (1)
51. Davenport, D., and R. M. Wallis. 1978. Arctic Harvester groundfish cruise no. 77-3 (October 11-28, 1977). 16 p. (1)
52. Marshall, D. E., R. F. Brown, V. D. Chahley, and D. G. Demontier. 1978. Preliminary catalogue of salmon streams and spawning escapements of Statistical Area 2W (Queen Charlotte Islands). 258 p. (12)
53. Moshenko, R. W., and G. Low. 1978. Lake whitefish, *Coregonus clupeaformis* (Mitchill), from the commercial fishery of Great Slave Lake, Northwest Territories, 1975-76. 16 p. (4)
55. Taguchi, S., and T. Platt. 1978. Phytoplankton biomass in Bedford Basin: volume, surface area, carbon content and size distribution. 404 p. (7)
56. Taguchi, S., and T. Platt. 1978. Size distribution and chemical composition of particulate matter in Bedford Basin, 1973 and 1974. 370 p. (7)
57. Heizer, S. R., R. J. Cook, and A. W. Argue. 1978. Basic data for the 1975 Canadian chinook and coho catch sampling and mark recovery program. (Vol. 1, parts 1 and 2 - Catch, sample size, observed and estimated mark recoveries for 16 catch regions; Vol. 2, parts 1 and 2 - Observed and estimated mark recoveries for each tag code; Vol. 3, parts 1 and 2 - Basic data for each chinook mark recovery;

- Vol. 4, parts 1 and 2 - Basic data for each coho mark recovery.) 2351 p. (12)
62. Irwin, B., W. G. Harrison, K. L. Denman, and T. Platt. 1978. Phytoplankton productivity and nutrient measurements at the edge of the continental shelf off Nova Scotia between April 28 and May 11, 1977. 90 p. (7)
63. Harbo, R. M., and I. K. Birtwell. 1978. Mercury content data for crustaceans and fishes from Howe Sound, British Columbia, May 1977 to April 1978. 20 p. (12)
64. MacPhail, D. K., and J. C. Calder. 1978. Water quality survey, Sherbrooke Lake, Nova Scotia. 40 p. (8)
65. Ballantyne, A. 1978. Graphs of sea levels at four British Columbia stations: Alert Bay, Tofino, Point Atkinson, Prince Rupert. 19 p. (1)
66. Barner, L. W., and F. H. C. Taylor. 1978. Midwater trawl tows and catches on *G. B. Reed* cruises GBR 74-1, -2 and GBR 75-4, -5 off the southwest coast of Vancouver Island. 47 p. (1)
67. Ballantyne, A. 1978. Temperatures obtained by expendable bathythermograph (XBT) during 1977 research cruises. 53 p. (1)
68. Wickett, W. P., J. A. Thomson, and A. Ballantyne. 1978. Transport computations for the North Pacific Ocean, 1977. 127 p. (1)
69. Scarsbrook, J. R., P. L. Miller, J. M. Hume, and J. McDonald. 1978. Purse seine catches of sockeye salmon (*Oncorhynchus nerka*) and other species of fish at Babine Lake, British Columbia, 1977 (Data record). 41 p. (1)
71. Weir, K. R., R. J. Beamish, M. S. Smith, and J. R. Scarsbrook. 1978. Hake and pollock study, Strait of Georgia bottom trawl cruise *G. B. Reed* February 25-March 13, 1975. 153 p. (1)
72. Marshall, D. E., R. F. Brown, G. A. Buxton, V. D. Chahley, and D. G. Demontier. 1978. Preliminary catalogue of salmon streams and spawning escapements of Statistical Area 2E (Queen Charlotte Islands). 346 p. (12)
73. Shearer, J. A., and D. R. DeClercq. 1978. Light extinction measurements in the Experimental Lakes Area - 1977 data. 49 p. (4)
74. DeClercq, D. R., and J. A. Shearer. 1978. Phytoplankton primary production, chlorophyll and suspended carbon in the Experimental Lakes Area - 1977 data. 62 p. (4)
75. Haegele, C. W., and R. D. Humphreys. 1978. Data record for 1977 herring spawn studies. 135 p. (1)
76. Percy, J. A., P. Vermette, P. Bouchard, and J. Fife. 1978. Osmoregulation and water permeability of arctic marine isopods, *Mesidotea entomon*, *M. sibirica* and *M. sabini*. 163 p. (5)
77. Beamish, R. J., C. Wood, and C. Houle. 1978. A summary of sablefish tagging studies conducted during 1977 by the Pacific Biological Station. 103 p. (1)
78. Harling, W. R., R. M. Wallis, M. R. Fretwell, and F. W. Mottl. 1978. *Arctic Harvester* groundfish cruise no. 78-3 (February 27-March 10, 1978). 35 p. (1)
81. Alexander, D. R. 1978. Hatchery salmonid production and distribution (1977), Nova Scotia, New Brunswick and Prince Edward Island. 109 p. (8)
82. Irwin, B., M. Hodgson, P. Dickie, and T. Platt. 1978. Phytoplankton productivity experiments in Baffin Bay and adjacent inlets from 22 August to 18 September 1977. 52 p. (7)
83. Irwin, B., P. Evans, and T. Platt. 1978. Phytoplankton productivity experiments and nutrient measurements in the Labrador Sea from 15 October to 31 October 1977. 40 p. (7)
84. Moores, R. B., R. W. Penney, and R. J. Tucker. 1978. Atlantic salmon angled catch and effort data, Newfoundland and Labrador, 1953-77. 274 p. (9)
85. Boyd, H. L. 1978. Annual report of shellfish toxicity monitoring program 1977. 86 p. (8)
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Graphs of surface salinity at nine
northeastern Pacific stations: Langara
Island, Triple Island, Bonilla Island,

Cape St. James, McInnes Island, Pine
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Ocean Station P. 45 p. (1)

INDUSTRY REPORTS/RAPPORTS A L'INDUSTRIE

Abbreviation/Abréviation: I

(NOTE: These reports contain the results of research and development that are useful to industry for either immediate or future application. Industry Reports are directed primarily towards individuals in the primary and secondary sectors of the fishing and marine industries. No restriction is placed on the subject matter and the series reflects the broad interests and policies of the Fisheries and Marine Service, namely, fisheries management, technology and development, ocean sciences and aquatic environments relevant to Canada.

Numbers 1-91 in this series were issued as Project Reports of the Industrial Development Branch, Technical Reports of the Industrial Development Branch, and Technical Reports of the Fishermen's Service Branch. The series name was changed with report number 92.)

(REMARQUE: Ces rapports contiennent les résultats des recherches et des progrès pouvant être utiles à l'industrie pour des applications soit immédiates soit futures. Ils sont principalement préparés à l'intention des membres des secteurs primaire et secondaire de l'industrie des pêches et de la mer. Il n'y a aucune restriction quant au sujet; de fait, la série reflète la vaste gamme des intérêts et des politiques du Service des pêches et de la mer, notamment: la gestion des pêches, les techniques et la mise en valeur, les sciences océaniques et l'environnement aquatique au Canada.

Les numéros 1 à 91 de cette série ont été publiés à titre de rapports sur les travaux de la Direction du développement industriel, de rapports techniques de la Direction du développement industriel, et de rapports techniques de la Direction des services aux pêcheurs. Le nom de la série a été changé à partir du rapport n° 92.)

93. Cauvin, D. M., and P. C. Thompson. 1977.
Rainbow trout farming: an economic perspective. 24 p. (4)
94. Westrheim, S. J. 1977. Production and
stock assessment of principal groundfish
stocks off British Columbia. 77 p. (1)
97. Wang, J. C. C., and E. R. Amiro. 1977.
Cold storage of the American oyster
(*Crassostrea virginica*) in the shell.
23 p. (8)
98. Dunn, D. L. 1977. Canada's east coast
sealing industry 1976: a socio-economic
review. 54 p. (10)

99. Harling, W. R., R. M. Wallis, and N. Sigmund. 1978. Industrial Development
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western British Columbia, January 1978.
19 p. (1)
101. Tobey, A., and J. Rycroft. (no date).
Shrimp midwater trawl development 1977
Gulf of St. Lawrence. 37 p. (8)
104. Bailey, R. F. J. 1978. Whelks on snow
crab fishing grounds in the south-
western Gulf of St. Lawrence. 9 p. (6)
105. Proverbs, T. B. 1978. Foreign investment
in the British Columbia fish processing
industry. 75 p. (12)

STUDIES/ETUDES

Abbreviation/Abréviation: S

(NOTE: Until 1970, reprints of these articles had been included in an annual volume of "Studies," composed of two parts. The final binding was the 1969 Studies, Part 2, which included No. 1355. These are no longer bound and distributed. We continue, however, to number and list all articles, which henceforth may be obtained in reprint form only from the author or originating establishment, indicated by the numeral at the end of each reference. See pages 1658 and 1659 for addresses corresponding to these numerals.)

(REMARQUE: Jusqu'en 1970, ces articles ont été réimprimés dans un volume annuel intitulé *Studies* composé de deux parties. La dernière parution a été dans *Studies* 1969, partie 2, qui comprenait le numéro 1355. Elles ne sont toutefois plus reliées ni distribuées. Nous continuons, cependant, à numéroter et à énumérer tous les articles qu'on peut obtenir seulement de l'auteur ou l'établissement de provenance qui est indiqué par le numéro à la fin de chaque référence. Voir aux pages 1658 et 1659 les adresses correspondant à ces numéros.)

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Abbreviation/ Abréviation: A

(NOTE: The numeral in parentheses at the end of each reference indicates the name of the Fisheries and Marine Service establishment from which request for a copy can be made. See pages 1658 and 1659 for addresses corresponding to these numerals.)

(REMARQUE: Le numéro entre parenthèses, à la fin de chaque référence, indique l'établissement du Service des pêches et des sciences de la mer d'où provient la documentation du rapport et auquel on peut en demander un exemplaire. Voir aux pages 1658 et 1659 les adresses correspondant à ces numéros.)

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CIRCULARS/CIRCULAIRES

HALIFAX LABORATORY/LABORATOIRE D'HALIFAX

Halifax, N.S./N.-E. (8)

Abbreviation/Abréviation: CHN

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(For full addresses see p. 1658 and 1659)

(Voir les adresses complètes aux pages 1658 et 1659)



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